CHAPTER EIGHT

Conformance, Monitoring and Deficiency Plans

The CMA is responsible for ensuring local government conformance with four elements of the CMP: the trip-reduction program, the land-use analysis program, payment of membership dues, and level-of-service standards.[1]

Monitoring provides feedback to determine whether the CMP's objectives are being met. The system performance data collected in the monitoring process can be used to adjust either the CMP or the actions of the local governments to meet legislative requirements. Monitoring also provides information that can be used to update the countywide travel model and database; adjust travel-demand management measures, transit standards, and level-of-service standards; and to determine whether it will be necessary for a local government to develop a deficiency plan. Deficiency plans are required where level-of-service standards are not being met.

Travel-Demand Management Element

Local jurisdictions must adopt site-design guidelines and implement congestion-reducing capital projects to meet the travel-demand management requirements.

The site-design guidelines must enhance transit/pedestrian/bicycle access. Each jurisdiction must submit a Site Design Guidelines Checklist by September 1 of each year specifying that they have adopted and are implementing such guidelines to encourage the use of alternative modes of travel.

Further, they must undertake capital improvements that contribute to congestion management and emissions reduction. Each jurisdiction is required to participate in the Transportation Fund for Clean Air, Surface Transportation Program, Congestion Mitigation and Air Quality and other funding programs and to submit projects that support bicycle, pedestrian, transit or carpool use. Details are provided in Chapter 5, Travel-Demand Management Element. (See Appendix D for the Travel-Demand Management Checklist.)

Land-Use Analysis Program

The CMA is required to develop a program that will analyze the impacts and determine mitigation costs of land-use decisions on the regional system. Local governments are responsible for implementation of the program. The program approach is described in Chapter 6, Land-Use Analysis Program.

Local jurisdictions are responsible for approving, ~~disallowing~~denying, or altering projects and land-use decisions and are required to determine land-development impacts on the Metropolitan Transportation System and formulate appropriate mitigation measures commensurate with the magnitude of the expected impacts.

[1] California Government Code Section 65089.3

Capital Improvement Program

The CMA is required to prepare and biennially update a Capital Improvement Program aimed at maintaining or improving transportation service levels as described in Chapter 7, Capital Improvement Program. Each city, the county, transit operators and Caltrans will provide input to these biennial updates.

Level-of-Service Standards

Local governments are accountable for meeting level-of-service standards as described in the CMP. If such standards are not met, a deficiency plan must be developed to describe how jurisdictions plan to meet the adopted level-of-service standards at the deficient segment or intersection, as well as how level of service of the system and air quality improvements will be achieved.[2]

CONFORMANCE

The CMA is responsible for determining conformance—whether or not local governments are complying with the requirements of the CMP.[3] The CMA compares the monitoring information (discussed in the next section) provided by local governments to the requirements of the adopted CMP. Reasons for non-conformance could include inadequate monitoring information, inadequate deficiency plan development, or failure to follow through with the program requirements for level-of-service, site design guidelines, capital improvements and land-use analysis.

In addition to these requirements, each city and the county must contribute its apportioned share to the support of the administrative costs of the CMA.

If the CMA finds a local jurisdiction in non-conformance, it will notify the local jurisdiction, which then has 90 days to remedy the area(s) of non-conformance. If the local jurisdiction does not effect a remedy, the CMA will notify the State Controller to withhold the Proposition 111 fuel tax funds to that jurisdiction, and the jurisdiction will not be eligible to receive funding for projects through the federal Surface Transportation Program or Congestion Mitigation and Air Quality Program, or the State Transportation Improvement Program.

If, over the next 12 months, the CMA determines that the jurisdiction is in conformance, the withheld Proposition 111 funds will be released. If after the 12-month period the city or County has not conformed, the withheld Proposition 111 funds will be released to the CMA for projects of regional significance included in the CMP or deficiency plans.

MONITORING

Outlined below is the monitoring that each jurisdiction should undertake to document to the CMA that it conforms to CMP requirements. Table 19 lists the schedule and basic requirements for monitoring. Further action by the CMA may be necessary to develop rules, procedures and other data requirements for monitoring and conformance.

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[2] California Government Code Section 65089.3(d)

[3] If the city of Oakland is found to be out of conformance, the Port of Oakland's projects will be treated as a city of Oakland project for purposes of CMP requirements and state statutes.

Table 18 — Conformance and Monitoring

SCHEDULE OF LOCAL GOVERNMENT AND TRANSIT OPERATOR REQUIREMENTS

Designated Roadway System

- By June 30, 2004 submit a list of potential CMP-designated routes based on Spring 2004 24-hour traffic counts.

Roadway Level-of-Service Standards (CMA)*

- Biennially in even numbered years - Monitor the level of service on the designated system and report to the CMA by May 1 of each year relative to consistency with the adopted standards.

Performance Element (CMA/Transit Operators/Cities/County)

- By June 1 of each year - By submitting its short-range transit plan, report to the CMA relative to attainment of the established standards.
- As part of this report, identify the resources necessary to continue to maintain this transit performance level during the succeeding five years.
- August 1 of each year - Submit available transportation performance measurement data to CMA for use in the Annual Transportation Performance Report.

Trip Reduction and Travel Demand (CMA)

- By September 1 of each year - submit the completed Site Design Guidelines Checklist to the CMA certifying that the Guidelines have been adopted and implemented.

Land-Use Analysis Program (Cities/County)

- By September 1 of each year - Demonstrate to the CMA that the program is being carried out.

Capital Improvement Program (Cities/County/Transit Operators/Caltrans/Port of Oakland/Others)

- By February 1 of each odd numbered year - Submit a list of projects intended to maintain or improve the level of service on the designated system, and to maintain transit performance standards. The Travel-Demand Management Element requires that local jurisdictions consider inclusion in the CIP, projects which support alternative modes.

* The CMA is currently monitoring level-of-service standards. If the cities, county or Caltrans assume responsibility, monitoring will be accomplished through a self-certification process involving the local jurisdictions and/or Caltrans and the CMA. See Chapter 3 for details relating to methods, frequency, etc.

Roadway Level-of-Service Standards

The CMA currently monitors level-of-service standards. If the cities, county or Caltrans assume this responsibility, monitoring may be accomplished through a self-certification process involving the local jurisdictions and/or Caltrans and the CMA. In this event, the responsible agency will annually monitor the level of service on segments of the CMP-designated system under its jurisdiction. Where a segment falls within two or more jurisdictions, the jurisdiction responsible for monitoring the segment is the jurisdiction with the greatest segment mileage.

The jurisdiction must conduct a p.m. peak-hour (4 p.m. to 6 p.m.) travel-speed sampling on a non-holiday Tuesday, Wednesday or Thursday and analyze level of service based on that data consistent with the methods for determining level of service outlined in the Chapter 3, Level-of-Service Standards. Studies on the impact of proposed development may supply some of the data (provided the sampling is done during the timeframes specified above), thereby reducing the need for data collection.

If the level of service is determined to be A, B or C for any year that is monitored, the monitoring frequency will then become every other monitoring period, until such time as the segment is found to operate at LOS D. Any segment determined to operate at LOS D, E, or F should then be monitored every study year.

If a segment not included in an infill opportunity zone is found to not meet the adopted level-of-service standards (see Chapter 3), a deficiency plan must be prepared in accordance with CMP requirements.

Performance Measures

Although there are no statutory requirements regulating performance element monitoring, the CMA intends to continue preparing a transportation performance report annually. The report will summarize current performance data, highlight any significant changes in performance and provide broad analyses of the results and any implications for policy and investment decisions made by the CMA.

DEFICIENCY PLANS

Deficiency plans provide a method for local governments to focus on areas where congestion problems are keeping system performance from meeting adopted standards. They provide an opportunity to analyze the causes of the problems and determine whether they can be fixed by local improvements or if it would be best to employ measures that will improve overall system efficiency and air quality.

Deficiency plans also provide local governments with the opportunity to give priority to system and non-capital mitigation methods to relieve congestion. The statutes specifically point to improved public transit service and facilities, improved non-motorized transportation facilities, high-occupancy vehicle facilities, parking cash-out programs and transportation control measures.

Table 18 summarizes the roadway or ramp segments that require or have required deficiency plans.

Table 19 — Roadway Segments Year of Deficiency Plan

STATUS	JURISDICTION	SEGMENT	YEAR DEFICIENCY PLAN REQUIRED
Deficiency Plan approved by CMA Board November 2000.~~being prepared for November 2001 Conformity Findings~~	Alameda County (participating jurisdictions: Oakland, San Leandro, Dublin, Pleasanton, Livermore)	I-580 Westbound from Center Street to I-238	2000
Deficiency Plan ~~being prepared for November 2001 Conformity Findings~~ approved by CMA Board November 2000	Fremont (participating jurisdiction: Newark)	Mowry Avenue Eastbound from Peralta Boulevard to SR 238/Mission Boulevard	2000
Deficiency Plan approved by CMA Board November 1999 and is being implemented.	Berkeley (participating jurisdictions: Albany, Oakland, Emeryville)	San Pablo Avenue Northbound from Allston Way to University Avenue	~~1998 and 2000~~Deficeiency Plan implemented, LOS Standard Restored
Deficiency Plan approved by CMA Board November 1999 and has been implemented.	Berkeley	University Avenue from San Pablo Avenue to Sixth Street	~~1998~~ Deficeiency Plan implemented, LOS Standard Restored
Deficiency Plan approved by CMA Board November 1999 and is being implemented.	Oakland (participating jurisdictions: Berkeley, Alameda)	The freeway connection between SR 260 eastbound (The Posey Tube) and northbound I-880	1998

Deficiency Plan Requirements

The need for deficiency plans is identified following the biennial level-of-service monitoring of the CMP roadway network. Deficiency plans are required once it is recognized that a CMP segment is not meeting the adopted level-of-service standard after allowable exemptions.

At a minimum, deficiency plans must include:

- Identification and analysis of the causes of the deficiency.
- A list of improvements necessary for the deficient segment or intersection to maintain the minimum level of service otherwise required and the estimated costs of the improvements.
- A list of improvements, programs or actions (and estimates of their costs) that will measurably improve multimodal performance of the system, and contribute to significant improvements in air quality.
- An action plan of the most effective implementation strategies to maintain the minimum level-of-service standards at the deficient segment, or to improve the current and future level of service of the system and contribute to significant air quality improvements. The action plan must include implementation strategies, a specific implementation schedule, and a description of its funding and implementation strategies. Special consideration for state or federal requirements must be taken into account when determining the feasibility of the action plan. Improvements funded through the CMP Capital Improvement Program, whether having local or system impact, must not degrade air quality.

Local Government Responsibilities

Local governments are responsible for preparing and adopting deficiency plans—proposed methods for bringing areas that do not meet level-of-service standards up to par. However, they will need to consult with the CMA, Caltrans, local transit providers, and BAAQMD as they prepare their deficiency plans. Local public-interest groups and members of the private sector may also have an interest in the development of deficiency plans.

During the process of developing the plan, the local agency will need to consider whether it is possible to make physical improvements to the deficient segment. It may not be possible to do so for a number of reasons, including cost, availability of real estate, public opposition and air quality plan conflicts.

In developing the deficiency plan, both local and system alternatives must be considered and described. Local governments and the CMA should examine the impact of the proposed deficiency plan on the CMP system. An action plan to implement the chosen alternative must also be provided.

Multi-jurisdictional Deficiency Plans

If it is determined that more than one local jurisdiction is responsible for causing a deficient segment or intersection, all responsible local jurisdictions shall participate in the development of a deficiency plan to be adopted by all participating local jurisdictions. The local jurisdiction in which the deficiency occurs shall have lead responsibility for developing the deficiency plan and for coordinating with other

local jurisdictions that have an impact on the system.[4]

Jurisdictions must participate if traffic to or from that jurisdiction, either an origin or destination at the deficient segment, represents 10 percent, as estimated by a CMA-certified model, of the capacity of the freeway/roadway.

Additional policies are:

- In order to eliminate any gaps and to ensure continuity in the planning process, a jurisdiction that does not meet the 10 percent threshold shall be required to participate in the deficiency plan process if it is surrounded by jurisdictions which meet the threshold for participation;
- All participating jurisdictions shall adopt ~~the exact same~~identical deficiency plan action plans.;
- The percent contribution of traffic specifically does not imply a commensurate financial share of the Deficiency Plan Action Plan;
- All owners/operators of a deficient segment of freeway or roadway along with transit operators shall be invited to participate in the deficiency plan process;
- A jurisdiction shall have the right to appeal as depicted in the Multi-jurisdictional Deficiency Plan Appeal Process (Figure 13); and
- For purposes of determining the capacity of a freeway or roadway the following criteria shall be used for multi-jurisdictional deficiency plans unless a local jurisdiction can demonstrate an alternative capacity:

Freeways: 2,000 vehicles/lane/hour
2-lane highways: 1,400 vehicles/lane/hour
Arterials: 800 vehicles/lane/hour

If a local jurisdiction responsible for participating in a multi-jurisdictional deficiency plan does not adopt the deficiency plan in accordance with the schedule and requirements outlined above, that jurisdiction shall be considered in non-conformance with the CMP.[5]

Local jurisdictions outside Alameda County that contribute significantly to a deficiency plan will be invited to participate, but cannot be compelled to do so.

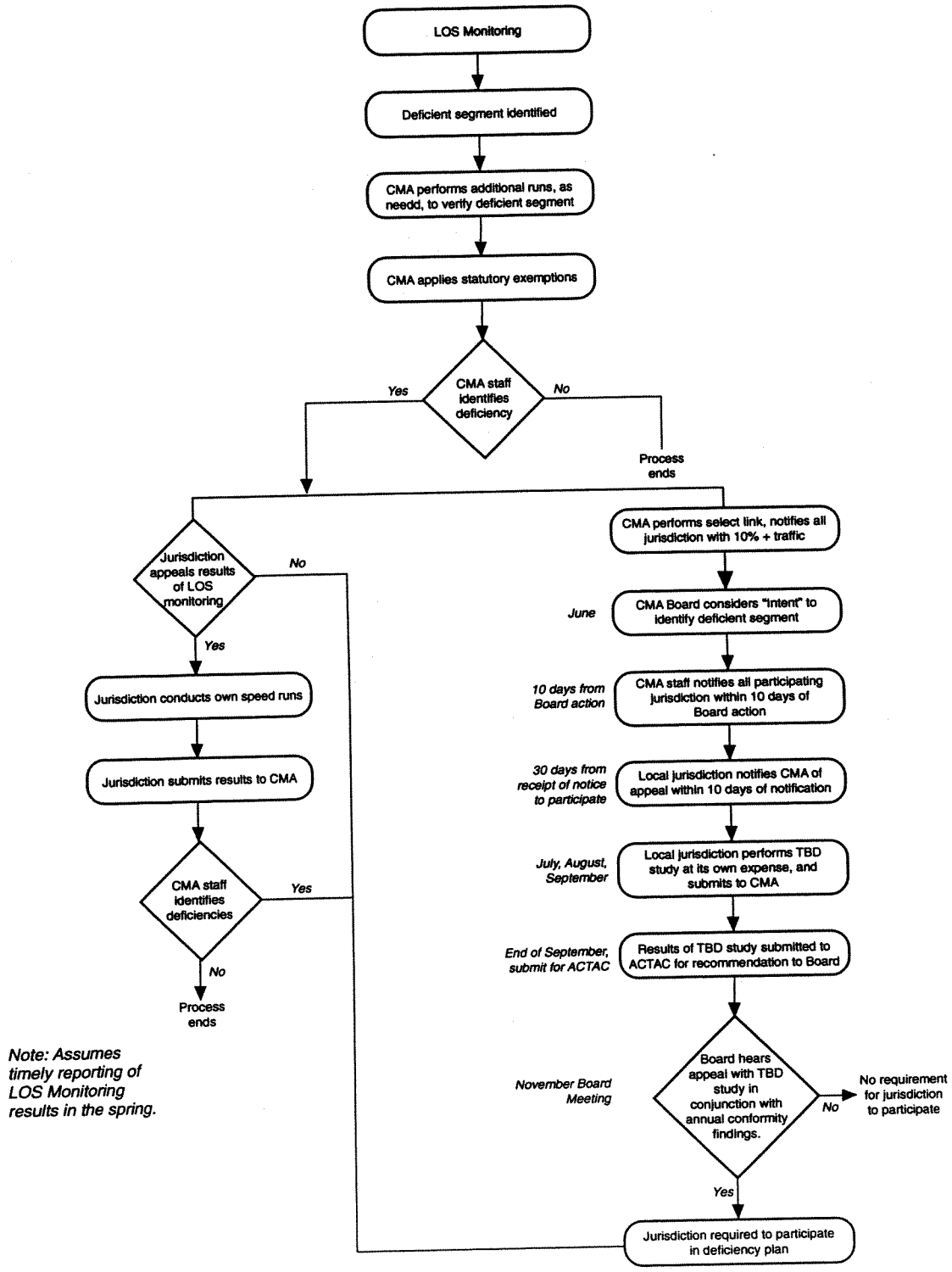
Conflict Resolution

Resolution of conflicts among local jurisdictions may be necessary during the multi-jurisdictional deficiency plan process. The CMA's adopted appeal process, as outlined in the Administrative Handbook, shall be used for any unresolved conflicts associated with multi-jurisdictional deficiency plans.

[4] The Port of Oakland is considered a governmental subdivision of the city of Oakland. Should a deficiency occur on a segment within the city of Oakland, the city shall be responsible for preparation of the deficiency plan. The Port's participation in the deficiency plan process shall be agreed upon by the city of Oakland and the Port prior to the preparation of the deficiency plan.

[5] California Government Code Section 65089.4(e)

Figure 13 — Multi-jurisdictional Deficiency Plan Appeal Process



Approval Process

Local governments are required to adopt deficiency plans at a "noticed" public hearing—one for which legal notices have been advertised. Local governments should provide sufficient notice of their intention to adopt deficiency plans to allow for members of the public to review and comment on it. Copies of the plans should be made available for review by interested agencies, groups and citizens.

After the local government has adopted the deficiency plan, it is forwarded to the CMA. The CMA must hold a noticed public hearing within 60 days of receiving the adopted plan, at which time it may either accept or reject the deficiency plan in its entirety. The CMA cannot modify the deficiency plan. The CMA will use the information provided by the program monitoring reports and consider the following items when reviewing deficiency plans:

- Consistency with the CMP, *Countywide Transportation Plan*, *Regional Transportation Plan*, Regional Transportation Improvement Program, general plans, and air quality plans;
- Adequacy of the deficiency analysis;
- Effectiveness of proposed improvements;
- Linkage of proposed improvements to level-of-service change; and
- Impacts of proposed plans to other segments of the regional system.

The CMA will seek the input of local agencies during the review of deficiency plans. If the CMA rejects a deficiency plan, it must give a clear statement as to its reasons for rejection and should also provide recommendations for improvements.

Approved or Required Deficiency Plans

San Pablo Avenue/I-80 Corridor

On April 24, 1997, the CMA Board recognized the San Pablo/I-80 Corridor as a basis for a future deficiency plan. The deficiency plan would apply to the CMP network within the following sub-area of the San Pablo Avenue/ I-80 Study limits, including the freeway ramps and future University Avenue/I-80 HOV ramp:

- North — Alameda/Contra Costa County line,
- South — 14th St. to western boundary of Mandela Pkwy. extending north to the eastern I-80 right-of-way,
- East — Martin Luther King Jr. Way/San Pablo Avenue, Marin, east side of San Pablo Ave., and
- West — the eastern boundary of the I-80 right-of-way.

I-880 Intermodal Corridor

On January 20, 2000, the CMA Board similarly recognized the I-880 Strategic Plan as a basis for a future deficiency plan. The plan would apply to the CMP network within the study limits, which are:

- the I-880 Cypress Freeway connection in the North,
- SR 237 in Milpitas in the South,
- the San Francisco Bay in the west, and
- I-580/SR 238, and I-680 in the east.

Complete Deficiency Plan Guidelines

In January 1993, the CMA Board approved deficiency plan guidelines. The guidelines, which were developed with significant input from ACTAC, describe the process, timelines and acceptable methodologies to be followed by local jurisdictions in developing deficiency plans. The full text of the guidelines can be obtained by contacting the CMA offices. The guidelines, as adopted, are incorporated by reference into the 2003~~1~~ CMP, including all their requirements and specifications. ~~The deficiency plan guidelines were amended in 1996 and will be updated in 2001.~~

CHAPTER NINE

Database and Travel Model

Every congestion management agency, in consultation with the regional transportation planning agency (MTC in the Bay Area), cities, and the county, must develop a uniform database on traffic impacts for use in a countywide travel model.[1] The CMA must approve computer models used for subareas, including models used by local jurisdictions for land-use impact analysis. All models must be consistent with the modeling methodology and databases used by MTC.

The purpose of this requirement is to bring to the congestion management decision making process a uniform technical basis for analysis. This includes consideration of the benefits of transit service and transportation demand management programs, as well as projects that improve congestion on the CMP-designated system. The modeling requirement is also intended to assist local agencies in assessing the impacts of new development on the transportation system.

The Alameda countywide travel model is an essential tool to the CMP planning process. The Alameda County CMP is a forward-looking program, espousing a philosophy of early action, to prevent conditions from deteriorating. The model allows the CMA to anticipate the potential impacts of local land-development decisions on the Metropolitan Transportation System.

[1] California Government Code Section 65089(c)

DATABASE DEVELOPMENT

The database developed for use with the countywide travel model is based on data summarized in the *Projections 2002~~30~~* report prepared by the ABAG. Projections of socioeconomic variables were made for the traffic analysis zones defined for Alameda County. By aggregating the projections made for each zone, the CMA can produce projections of socioeconomic characteristics for unincorporated areas of the county, the 14 cities and for the four planning areas for Alameda County.

Note: Projections 2003, SMART Growth Forecast, develop ed by ABAG will be incorporated into the model when ~~it~~they becomes available in late 2003.

MODEL DEVELOPMENT

The framework established for the model encompasses the following four components:

- Trip generation (forecast of the number of trips by traffic analysis zone)
- Trip distribution (distribution of forecast trips between each traffic analysis zone)
- Modal split of inter-zonal trips (distribution of trips by mode within each traffic analysis zone)
- Assignment (forecast of trips originating or destined to external zones)

These are the typical model components found in any model whose purpose is to produce

simulations of travel demand based on different assumptions about land-use, demographic and transportation characteristics.

Development and validation of the model were predicated on the following concepts:

- Consistency, to the greatest extent possible, with the assumptions and procedures established and used by MTC to produce regional travel-demand forecasts. More specifically, maintaining the same variables in the equations that comprise the trip generation, trip distribution and mode split components of MTC's travel-demand model framework.
- Where necessary (in order to produce validated forecasts of travel on arterials or intra-county transit services), enhance the capacity of MTC's models by incorporating the simulation of certain types of travel not modeled by MTC.

The model was developed using the EMME/2 software, which is an interactive transportation planning program that produces numerical and graphic representations of travel supply and demand.

The model has been structured to provide forecasting detail that adequately addresses the evaluation needs of both countywide and corridor-specific transportation strategies. To accomplish these objectives, the Alameda countywide model has been developed and validated by defining a graphic zone structure detailed enough to depict changes in land use and demographic characteristics that would affect travel demand on arterials and intra-county transit systems, and by establishing highways and transit networks detailed enough for those types of travel demand.

In addition, the model incorporates a representation of land-use and demographic characteristics of the nine-county Bay Area, which allows it to produce travel-demand forecasts that incorporate influences of regional travel demand on transportation facilities in Alameda County. Travel originating or terminating outside the nine-county Bay Area is also taken into account, though not through the use of a detailed land-use database.

PLANNING AREAS

Alameda County has been subdivided into four areas of analysis, or planning areas. Planning areas are analogous to four of the five MTC superdistricts in Alameda County[2]

The planning areas are defined as follows:

- Planning Area 1 consists of the cities of Albany, Berkeley, Emeryville, Oakland, Alameda and Piedmont;
- Planning Area 2 consists of San Leandro, Hayward, and the unincorporated areas of Castro Valley and San Lorenzo;
- Planning Area 3 consists of Union City, Newark and Fremont; and
- Planning Area 4 consists of Pleasanton, Dublin, Livermore and the unincorporated areas of east County.

[1] MTC superdistricts 18 and 19 comprise Planning Area 1, while superdistricts 17,16 and 15 equate to Planning Areas 2, 3 and 4, respectively.

TRAFFIC ANALYSIS ZONE SYSTEM

The traffic analysis zone structure developed for the Alameda countywide travel model is a refinement of the zone structure used by MTC for their nine-county regional travel model. Traffic analysis zones are small geographical subdivisions of a region. Socioeconomic variables, such as households and employment data, are collected at the traffic analysis zone level for input into the travel-demand models. Ultimately, the auto vehicle trips and number of individual trips on transit ("person trips") will be assigned from each traffic analysis zone onto the highway and transit networks.

The Alameda countywide model required disaggregating or splitting the MTC zones into more and smaller traffic analysis zones. The new Alameda County traffic analysis zones nest precisely within the larger MTC zones. This ensures accurate disaggregation of MTC's person trip tables to the traffic zones, and allows direct comparisons between the Alameda countywide model outputs and those of the MTC model.

Internal Alameda County Zones

Within Alameda County, MTC's zone system was refined to better suit the more detailed model network proposed for the Alameda countywide model. As a result of this zone refinement effort, the MTC zones in Alameda County were increased approximately to 982 (728 in Alameda County and 254 outside of the county). The 728 traffic analysis zones within Alameda County are grouped by the four planning areas. (Note: Maps depicting the traffic analysis zones are available upon request at the CMA offices.)

External Zones

Outside of Alameda County, the traffic analysis zone level of detail decreases as the distance from Alameda County increases. The MTC zone structure was used for areas directly adjacent to Alameda County. Outside of Alameda County, 254 new traffic analysis zones were created from the MTC zones.

Included in the model were six external zones at the San Joaquin County line, since travel from San Joaquin County has a large influence on travel patterns in Alameda County. Including external zones and zone numbers left available for possible future zone splits, the Alameda countywide travel model has been established to produce forecasts for a system of 982 zones.

~~Alameda County. Outside of Alameda County, 254 new traffic analysis zones were created from the MTC zones.~~

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MODEL RESULTS

The model produces the following countywide travel information:

- trip generation
- trip distribution
- modal split of inter-zonal trips
- forecast of trips originating or destined to external zones
- peak hour level of service and traffic volume projections by segment (2005, 2020, and 2025)
- miles of congestion, by type of facility (arterial, freeway)
- vehicle-miles traveled, by facility and by level of service
- vehicle-hours traveled, by facility and by level of service

Model Adequacy

The model has been thoroughly tested and validated for 1990 conditions. The testing and validation procedure compared forecast results from the model to observed traffic volumes and transit ridership data. The model will be further refined with the addition of updated land-use information and network characteristics that will be submitted periodically to the CMA by local jurisdictions as part of the land-development impact analysis process of the CMP. The CMA initiated a comprehensive update of the countywide travel model in 1995. With assistance from transit operators and local jurisdictions, the updated model was recalibrated to 1990 census information, and enhancements were added to the model to increase reliability of the forecasts. The 2000 census data are not yet available to update the model base year to 2000.

SUBAREA MODELS

The Tri-Valley and the Tri-Cities area (planning areas 3 and 4) have developed or are in the process of developing transportation models that are subsets of the countywide model. Neither is certified by the CMA at this time. The city of Hayward has completed the development of a sub-area model for use in Planning Area 2, and this subarea model was certified by the CMA in 1996. The subarea model will need to be recertified pending an update of the Planning Area 2 model land use to *Projections 200~~0~~2*.

~~**Model Use**~~

~~A policy and guidelines for utilization of the countywide travel model will be amended in the summer of 2001~~

2004 Model Update

The CMA travel demand model will undergo a major update prompted by the 2000 eCensus. It is expected that the software will be ~~stretches~~ changed to be consistent with MTC and ~~some~~ surrounding ~~C~~counties. The change will permit complete consistency with the basic assumptions of the regional model and conserve limited resources. The update is expected to begin in 2004.

resources. The update is expected to begin in 2004.

CHAPTER TEN

Conclusions and Implementation Issues

The Congestion Management Program (CMP) has several interrelated elements intended to foster better coordination among decisions about land development, transportation and air quality. The development and update of the Alameda County program has surfaced several issues requiring further attention by the CMAs. Several conclusions can be reached about the CMP relative to the requirements of law and its purpose and intent.

The Alameda County Congestion Management Program fulfills the spirit and intent, as well as the requirements of the law. Specifically, the Congestion Management Program:

1. Contributes to maintaining or improving transportation service levels.

   The projects and programs contained in the CMP are a subset of the Capital Investment Program adopted in the Alameda County 2001 *Countywide Transportation Plan*, the long-range transportation plan for Alameda County. The CMP can be viewed as the short-range implementation program for the *Countywide Transportation Plan.* As the first step towards the year 2025 projects and programs, the CMP is making progress toward maintaining or improving transportation service levels.

2. Conforms to MTC's criteria for consistency with the Regional Transportation Plan.

   Table 20 lists MTC's consistency requirements for CMPs in the Bay region. All these requirements have been met by the Alameda County CMP.

3. Provides a travel model whose specifications and output are consistent with MTC's regional model.

   The model has undergone exhaustive scrutiny at the local and subregional level and is fully validated. The model was transmitted to MTC in early May, 1991, for a finding of consistency, and received a finding of consistency for both the 1991 and 1993 CMPs. Further, the CMA completed a comprehensive effort to update the countywide model in 1997 to keep pace with changes made recently by MTC and to enhance the reliability of traffic forecasts produced by the countywide model. The next major update will be when the 2000 census data is available. Update is expected to begin in early 2004.

4. Is consistent with MTC's Transportation Control Measures Plan.

   The transportation control measures plan has been incorporated in the BAAQMD's 1997 Clean Air Plan for the Bay Area. As shown in Appendix E, the CMP includes many

project types and programs identified in the plan. Appendix E lists the 2001 CMP capital improvements program and its relationship to state and federal transportation control measures. The CMA will work with the BAAQMD and project sponsors to define appropriate responsibility and timely implementation of these measures. It is therefore reasonable to conclude that the CMP is consistent with the plan.

5. Specifies a method for estimating roadway level of service that is consistent with state law.

   The Alameda County CMP specifies the use of the *Highway Capacity Manual* approach for assessing level of service. This is one of the two approaches permitted by the law. ~~The CMA will evaluate the new (2000) *Highway Capacity Manual* to identify any changes that would be required to the Congestion Management Program during the 2002 Level-of-Service Monitoring update. Until then,~~ Tthe 1985 *Highway Capacity Manual* will be used. Infill opportunity zones are specifically exempt from LOS standard requirements.

6. Identifies candidate projects for the Regional Transportation Improvement Program and federal Transportation Improvement Program which meet MTC's minimum requirements.

   The *Regional Transportation Improvement Program* and federal *Transportation Improvement Program* candidates listed in the CMP's Capital Improvement Program (Chapter 7) have been evaluated and all candidate projects conform to MTC's screening criteria.

7. Has been developed in cooperation with the cities, the county of Alameda, transit operators, the BAAQMD, MTC, adjacent counties, Caltrans and other interested parties.

   The process used to update the 2003~~1~~ CMP included circulation of proposed policy papers and draft documents to interested parties through regular mailings for ACTAC, the CMA's Plans and Programs Committee, and CMA Board meetings. The mailing list included technical representatives of all cities in Alameda County, the county of Alameda, transit operators, the Port of Oakland, the Alameda County Transportation Authority, the BAAQMD, MTC, Caltrans and ABAG. In addition, the designation of the CMP network will be coordinated with adjacent counties within the MTC region and is expected to be consistent with those congestion management programs. The ~~2001~~ 2003 update will be widely circulated for review by interested public agencies and the public.

8. Provides a forward-looking approach to dealing with the transportation impacts of local land-use decisions.

   The Land-Use Analysis Program provides for consultation with the CMA early in the land-development process. This early input will help assure a better linkage between land-use decisions and transportation investment.

Table 20 — Summary of MTC's Regional Consistency Requirements For CMPs

RTP Consistency

Definition of the CMP System

Have all State highways and principal arterials been included?

Are all state highways identified?

Has the CMA developed a clear, reasonable definition for "principal arterials" as part of its submittal plan?

Has this definition been consistently applied in the selection of arterials to include in the designated system? If not, why?

How does the CMP-designated system relate to MTC's Metropolitan Transportation System in the *Regional Transportation Plan*?

Does the CMP System connect to the CMP Systems in adjacent counties?

Air Quality Requirements

Does the CMP include locally implementable Federal and State TCMs, as previously documented and included in MTC's 2001 RTP, MTC Resolution 2131, and the BAAQMD's 1997 Clean Air Plan?

Modeling Consistency

Is the "base case" forecasting network limited to the approved Transportation Improvement Program?

Are "ABAG consistent" demographics used? If alternative demographics have been used in addition to the "ABAG consistent" forecasts, have the demographic inputs and travel forecasts been compared to the "ABAG consistent" based travel forecasts?

Are the regional "core" assumptions for auto operating costs, transit fares and bridge tolls being used, or are reasons to the contrary documented?

Does the forecasting model include transit and carpool use (through either a person trip generation model or a "borrowed share" approach)?

Does the model produce trip distribution results that are reasonably consistent with those of MTC?

Is the modeling methodology documented?

Level-of-Service Consistency

Is level of service to be assessed by a method in Circular 212, the 1985 or 1994 *Highway Capacity Manual*? If not, has MTC found the methodology consistent with the HCM?

RTIP/TIP Requirements

Are the proposed RTIP projects consistent with the RTP?

Do the projects proposed for inclusion in the RTIP meet the minimum screening requirements established by MTC for the RTIP?

Process

Has the CMP been developed in cooperation with all concerned agencies, i.e., transit agencies, applicable air quality district(s), MTC, adjacent counties, etc.?

Has the CMP been formally adopted according to the requirements of the legislation?

Note: Detailed requirements for regional consistency are outlined in MTC Resolution 3000, revised June 2003. The supporting documentation's can be obtained at the CMA Offices.

IMPLEMENTATION ISSUES

During the development and update of the CMP for Alameda County, several issues have been uncovered which will need further action by the CMA. Some of these implementation issues may also require action by the Legislature.

1. Funding to support the CMP, including adequate capital resources and CMA/local government funding

   The CMA has identified the cost of maintaining or improving transportation service levels through the year 2025 as part of the *Countywide Transportation Plan.* This cost is large and well beyond existing funding sources. Therefore, further statewide attention to transportation funding will be necessary, if the CMP law is to achieve its intended goal.

   The CMP law also imposes significant costs on local government that are not uniform throughout the urbanized areas of the state. In southern California, existing transportation commissions are the designated CMAs. These commissions have funding resources available to them for the CMP not available in the Bay region. The result is that a higher percentage of Proposition 111 fuel tax subventions will be devoted to CMP administration in the Bay region than in southern California. These inequities among different parts of the state may not have been intended by the author of the legislation (Assemblyman Katz).

   With the passage of the federal Intermodal Surface Transportation Efficiency Act of 1991 and Transportation Efficiency Act in 1997, new requirements have been placed on MTC relative to congestion management. MTC is passing funds through to the CMAs in the Bay region to assist in implementing the 1991 Act. These funds, however, do not fully cover the cost of CMA administration. ~~In addition, there will be the challenge of reauthorizing the 1997 Act.~~

2. Ability of the CMA to influence transportation investment when most transportation funding programs are beyond the purview of the CMP legislation

   Funding programs such as transit operating funds, most transit capital funding, the interregional road program, the highway rehabilitation program and the toll bridge program are outside the CMP. The interregional road program and highway rehabilitation program are administered directly by Caltrans. How can the CMA fulfill the intent of the CMP legislation if so many programs are beyond its authority?

3. Responsibility for monitoring and maintenance of level of service on the state highway system

   CMP law indicates that Caltrans is responsible for monitoring level-of-service standards on the state highway system, if the CMA designates responsibility to Caltrans.[1] These are state-owned facilities, and it would be reasonable to assume that the state is responsible. The CMA will continue to work with Caltrans on the level-of-service monitoring process to ensure that consistent level-of-service results can be maintained if

[1] Katz, Statutes of 1995

the CMA delegates future monitoring responsibilities to Caltrans.

The CMP law also recognizes that responsibility for sustaining level-of-service standards on local roadways and the state highway system should be shared between the local government where the roadway is found and other local jurisdictions which contribute significant a percentage of traffic. This change in state law recognizes that other jurisdictions may be partially responsible for the roadway exceeding the standards and that local government has little authority over the state highway system. Some exemptions, such as interregional trips, have been built into the current law, but these exemptions do not deal sufficiently with the problem. Corridor-level planning may offer the most reasonable approach to this multi-jurisdictional problem.

4. Potentially conflicting goals of the CMP and air quality programs

The CMP law is aimed at reducing congestion, while the air quality laws are directed at reducing vehicle emissions. These two goals can conflict. For example, staggered work hours and flextime can reduce peak-period congestion, but may result in essentially the same number of vehicle trips being made throughout the day. Congestion-related smog would be reduced, but not as much as if the vehicle trip were completely replaced by a walk or bicycle trip. Therefore, the CMA will need to work with the BAAQMD to identify strategies that accomplish both goals and then agree upon the applicability of other strategies to one or both of the goals.

5. Modification to the CMP network

The CMP network will be reviewed every four years, beginning with the 2003~~+~~ CMP. Those additional roadways that meet the criteria for inclusion will be added. However, State law does not provide incentives to local jurisdictions to add roadways to the CMP network. In fact, there are significant disincentives to adding roadways that may in the future deteriorate to LOS F resulting in deficiency plan requirements and the risk to local jurisdictions of losing Proposition 111 gas tax funds.

6. Transportation revenue shortfalls

State and federal transportation funding continues to be inadequate to address both capital and transit operating costs. The shortfalls may jeopardize our ability to maintain and improve transportation levels of service. Worsening traffic congestion on the CMP-designated roadway system will trigger requirements for local jurisdictions to prepare and adopt deficiency plans, or risk losing Proposition 111 gas tax funds for local projects. The CMA, in cooperation with other transportation partners, will need to address this issue.

7. Land-use analysis program

The CMA will continue to improve the Land-Use Analysis Program to make it meaningful, but not resource-intensive. The results of the MTC-CMA ~~TLV~~Transportation and land use partnership will be amended into the CMP as appropriate.

8. CMP-designated routes

The following procedure and schedule for adding roadways to the CMP-designated system was developed by ACTAC. The jurisdictions will review their roadways systems for routes that may meet the "Criteria for Inclusion of Principal Arterials." For potential routes, each jurisdiction will conduct 24-hour traffic counts for a period including a Tuesday through Thursday of a typical week. Traffic counts should be taken around the first week in April 2004. The schedule for future updates is shown in Table 21.

9. Congestion pricing strategies

The Alameda County CMA has secured federal funding to evaluate, plan and implement a "value-pricing" demonstration project in the I-680 Corridor. The study ~~will consist of two phases: Phase 1 will evaluate a range of alternatives, both roadway alignment and pricing mechanisms, to determine the feasibility of implementing a priced or high-occupancy toll facility. Key factors such as physical constraints, institutional opportunities and constraints, operational issues, and revenue potential will be identified for each option. The range of options will be narrowed to include those with the most potential for success:~~

- ~~buy-in to high-occupancy vehicle lane by single-occupant vehicles. I-680 high-occupancy vehicle lane (Rt. 84 in Sunol to Rt. 237 in Milpitas) will be studied to determine if there is sufficient capacity for a subscription buy-in.~~determined that a HOT lane is operationally, financially ~~seally~~ and physically feasible. The CMA Board has directed staff to pursue a 3-year pilot program for southbound ~~SB~~ I-680. Funding and authorizing authority are needed to implement the pilot project.
-
- In addition, the CMA will continue to investigate.

free transits on Spare the Air days.

- off-peak transit fare discounts.
- parking ticket surcharge by the Alameda County jurisdictions, revenues to be used for transit.

~~10. TDM checklist~~

~~During the 2003 update of the CMP, revisit the TDM Checklist to determine if modifications are necessary. The TDM Checklist is found in Appendix D.~~

Table 21 — Implementation Schedule

TASK	WHO	WHEN
Review Criteria for Adding Roadways	Jurisdictions	January ~~2003~~2005
Update Criteria in ~~2003~~ 2005 CMP	ACTAC/Board	June ~~2003~~2005
Identify Potential Routes	Jurisdictions	January 2004
Review Routes	ACTAC/Board	February 2004
Collect Traffic Data	Jurisdictions	March/April 2004
Review Data	ACTAC/Board	May 2004
Select CMP Designated Routes	ACTAC/Board	June 2004
Incorporate Routes in 2005 CMP	ACTAC/Board	June 2005

In order to be in compliance with the CMP, each jurisdiction must submit potential CMP-designated routes to the CMA by June 30, 2004. The identification of routes must be based on 24-hour counts taken in spring 2004.

APPENDIX A

Congestion Management Program Legislation

65080.
(a) Each transportation planning agency designated under Section 29532 or 29532.1 shall prepare and adopt a regional transportation plan directed at achieving a coordinated and balanced regional transportation system, including, but not limited to, mass transportation, highway, railroad, maritime, bicycle, pedestrian, goods movement, and aviation facilities and services. The plan shall be action-oriented and pragmatic, considering both the short-term and long-term future, and shall present clear, concise policy guidance to local and state officials. The regional transportation plan shall consider factors specified in Section 134 of Title 23 of the United States Code. Each transportation planning agency shall consider and incorporate, as appropriate, the transportation plans of cities, counties, districts, private organizations, and state and federal agencies.

(b) The regional transportation plan shall include all of the following:

(1) A policy element that describes the transportation issues in the region, identifies and quantifies regional needs, and describes the desired short-range and long-range transportation goals, and pragmatic objective and policy statements. The objective and policy statements shall be consistent with the funding estimates of the financial element. The policy element of transportation planning agencies with populations that exceed 200,000 persons may quantify a set of indicators including, but not limited to, all of the following:

(A) Measures of mobility and traffic congestion, including, but not limited to, vehicle hours of delay per capita and vehicle miles traveled per capita.

(B) Measures of road and bridge maintenance and rehabilitation needs, including, but not limited to, roadway pavement and bridge conditions.

(C) Measures of means of travel, including, but not limited to, percentage share of all trips (work and nonwork) made by all of the following:

(i) Single occupant vehicle.

(ii) Multiple occupant vehicle or carpool.

(iii) Public transit including commuter rail and intercity rail.

(iv) Walking.

(v) Bicycling.

(D) Measures of safety and security, including, but not limited

to, total injuries and fatalities assigned to each of the modes set forth in subparagraph (C).

(E) Measures of equity and accessibility, including, but not limited to, percentage of the population served by frequent and reliable public transit, with a breakdown by income bracket, and percentage of all jobs accessible by frequent and reliable public transit service, with a breakdown by income bracket.

(F) The requirements of this section may be met utilizing existing sources of information. No additional traffic counts, household surveys, or other sources of data shall be required.

(G) For the region defined in Section 66502, the indicators specified in this paragraph shall be supplanted by the performance measurement criteria established pursuant to subdivision (e) of Section 66535, if that subdivision is added to the Government Code by Section 1 of Senate Bill 1995 of the 1999-2000 Regular Session.

(2) An action element that describes the programs and actions necessary to implement the plan and assigns implementation responsibilities. The action element may describe all projects proposed for development during the 20-year life of the plan.

The action element shall consider congestion management programming activities carried out within the region.

(3) (A) A financial element that summarizes the cost of plan implementation constrained by a realistic projection of available revenues. The financial element shall also contain recommendations for allocation of funds. A county transportation commission created pursuant to Section 130000 of the Public Utilities Code shall be responsible for recommending projects to be funded with regional improvement funds, if the project is consistent with the regional transportation plan. The first five years of the financial element shall be based on the five-year estimate of funds developed pursuant to Section 14524. The financial element may recommend the development of specified new sources of revenue, consistent with the policy element and action element.

(B) The financial element of transportation planning agencies with populations that exceed 200,000 persons may include a project cost breakdown for all projects proposed for development during the 20-year life of the plan that includes total expenditures and related percentages of total expenditures for all of the following:

(i) State highway expansion.

(ii) State highway rehabilitation, maintenance, and operations.

(iii) Local road and street expansion.

(iv) Local road and street rehabilitation, maintenance, and operation.

(v) Mass transit, commuter rail, and intercity rail expansion.

(vi) Mass transit, commuter rail, and intercity rail rehabilitation, maintenance, and operations.

(vii) Pedestrian and bicycle facilities.
(viii) Environmental enhancements and mitigation.
(ix) Research and planning.
(x) Other categories.

(c) Each transportation planning agency may also include other factors of local significance as an element of the regional transportation plan, including, but not limited to, issues of mobility for specific sectors of the community, including, but not limited to, senior citizens.

(d) Each transportation planning agency shall adopt and submit, every three years, an updated regional transportation plan to the California Transportation Commission and the Department of Transportation. The plan shall be consistent with federal planning and programming requirements. A transportation planning agency that does not contain an urbanized area may at its option adopt and submit a regional transportation plan once every four years beginning by September 1, 2001. Prior to adoption of the regional transportation plan, a public hearing shall be held, after the giving of notice of the hearing by publication in the affected county or counties pursuant to Section 6061.

65088.

The Legislature finds and declares all of the following:

(a) Although California's economy is critically dependent upon transportation, its current transportation system relies primarily upon a street and highway system designed to accommodate far fewer vehicles than are currently using the system.

(b) California's transportation system is characterized by fragmented planning, both among jurisdictions involved and among the means of available transport.

(c) The lack of an integrated system and the increase in the number of vehicles are causing traffic congestion that each day results in 400,000 hours lost in traffic, 200 tons of pollutants released into the air we breathe, and three million one hundred thousand dollars ($3,100,000) added costs to the motoring public.

(d) To keep California moving, all methods and means of transport between major destinations must be coordinated to connect our vital economic and population centers.

(e) In order to develop the California economy to its full potential, it is intended that federal, state, and local agencies join with transit districts, business, private and environmental interests to develop and implement comprehensive strategies needed to develop appropriate responses to transportation needs.

(f) In addition to solving California's traffic congestion crisis, rebuilding California's cities and suburbs, particularly with affordable housing and more walkable neighborhoods, is an important

part of accommodating future increases in the state's population because homeownership is only now available to most Californians who are on the fringes of metropolitan areas and far from employment centers.

(g) The Legislature intends to do everything within its power to remove regulatory barriers around the development of infill housing, transit-oriented development, and mixed use commercial development in order to reduce regional traffic congestion and provide more housing choices for all Californians.

(h) The removal of regulatory barriers to promote infill housing, transit-oriented development, or mixed use commercial development does not preclude a city or county from holding a public hearing nor finding that an individual infill project would be adversely impacted by the surrounding environment or transportation patterns.

65088.1.

As used in this chapter the following terms have the following meanings:

(a) Unless the context requires otherwise, "regional agency" means the agency responsible for preparation of the regional transportation improvement program.

(b) Unless the context requires otherwise, "agency" means the agency responsible for the preparation and adoption of the congestion management program.

(c) "Commission" means the California Transportation Commission.

(d) "Department" means the Department of Transportation.

(e) "Local jurisdiction" means a city, a county, or a city and county.

(f) "Parking cash-out program" means an employer-funded program under which an employer offers to provide a cash allowance to an employee equivalent to the parking subsidy that the employer would otherwise pay to provide the employee with a parking space. "Parking subsidy" means the difference between the out-of-pocket amount paid by an employer on a regular basis in order to secure the availability of an employee parking space not owned by the employer and the price, if any, charged to an employee for use of that space.

A parking cash-out program may include a requirement that employee participants certify that they will comply with guidelines established by the employer designed to avoid neighborhood parking problems, with a provision that employees not complying with the guidelines will no longer be eligible for the parking cash-out program.

(g) "Infill opportunity zone" means a specific area designated by a city or county, pursuant to subdivision (c) of Section 65088.4,

zoned for new compact residential or mixed use development within one-third mile of a site with an existing or future rail transit station, a ferry terminal served by either a bus or rail transit service, an intersection of at least two major bus routes, or within 300 feet of a bus rapid transit corridor, in counties with a population over 400,000. The mixed use development zoning shall consist of three or more land uses that facilitate significant human interaction in close proximity, with residential use as the primary land use supported by other land uses such as office, hotel, health care, hospital, entertainment, restaurant, retail, and service uses. The transit service shall have maximum scheduled headways of 15 minutes for at least 5 hours per day. A qualifying future rail station shall have broken ground on construction of the station and programmed operational funds to provide maximum scheduled headways of
15 minutes for at least 5 hours per day.

(h) "Interregional travel" means any trips that originate outside the boundary of the agency. A "trip" means a one-direction vehicle movement. The origin of any trip is the starting point of that trip. A roundtrip consists of two individual trips.

(i) "Level of service standard" is a threshold that defines a deficiency on the congestion management program highway and roadway system which requires the preparation of a deficiency plan. It is the intent of the Legislature that the agency shall use all elements of the program to implement strategies and actions that avoid the creation of deficiencies and to improve multimodal mobility.

(j) "Multimodal" means the utilization of all available modes of travel that enhance the movement of people and goods, including, but not limited to, highway, transit, nonmotorized, and demand management strategies including, but not limited to, telecommuting. The availability and practicality of specific multimodal systems, projects, and strategies may vary by county and region in accordance with the size and complexity of different urbanized areas.

(k) "Performance measure" is an analytical planning tool that is used to quantitatively evaluate transportation improvements and to assist in determining effective implementation actions, considering all modes and strategies. Use of a performance measure as part of the program does not trigger the requirement for the preparation of deficiency plans.

(l) "Urbanized area" has the same meaning as is defined in the 1990 federal census for urbanized areas of more than 50,000 population.

(m) "Bus rapid transit corridor" means a bus service that includes at least four of the following attributes:

(1) Coordination with land use planning.

(2) Exclusive right-of-way.

(3) Improved passenger boarding facilities.
(4) Limited stops.
(5) Passenger boarding at the same height as the bus.
(6) Prepaid fares.
(7) Real-time passenger information.
(8) Traffic priority at intersections.
(9) Signal priority.
(10) Unique vehicles.

65088.3.
This chapter does not apply in a county in which a majority of local governments, collectively comprised of the city councils and the county board of supervisors, which in total also represent a majority of the population in the county, each adopt resolutions electing to be exempt from the congestion management program.

65088.4.
(a) It is the intent of the Legislature to balance the need for level of service standards for traffic with the need to build infill housing and mixed use commercial developments within walking distance of mass transit facilities, downtowns, and town centers and to provide greater flexibility to local governments to balance these sometimes competing needs.

(b) Notwithstanding any other provision of law, level of service standards described in Section 65089 shall not apply to the streets and highways within an infill opportunity zone. The city or county shall do either of the following:

(1) Include these streets and highways under an alternative areawide level of service standard or multimodal composite or personal level of service standard that takes into account both of the following:

(A) The broader benefits of regional traffic congestion reduction by siting new residential development within walking distance of, and no more than one-third mile from, mass transit stations, shops, and services, in a manner that reduces the need for long vehicle commutes and improves the jobs-housing balance.

(B) Increased use of alternative transportation modes, such as mass transit, bicycling, and walking.

(2) Approve a list of flexible level of service mitigation options that includes roadway expansion and investments in alternate modes of transportation that may include, but are not limited to, transit infrastructure, pedestrian infrastructure, and ridesharing, vanpool, or shuttle programs.

(c) The city or county may designate an infill opportunity zone by adopting a resolution after determining that the infill opportunity

zone is consistent with the general plan and any applicable specific plan. A city or county may not designate an infill opportunity zone after December 31, 2009.

(d) The city or county in which the infill opportunity zone is located shall ensure that a development project shall be completed within the infill opportunity zone not more than four years after the date on which the city or county adopted its resolution pursuant to subdivision (c). If no development project is completed within an infill opportunity zone by the time limit imposed by this subdivision, the infill opportunity zone shall automatically terminate.

65088.5.

Congestion management programs, if prepared by county transportation commissions and transportation authorities created pursuant to Division 12 (commencing with Section 130000) of the Public Utilities Code, shall be used by the regional transportation planning agency to meet federal requirements for a congestion management system, and shall be incorporated into the congestion management system.

65089.

(a) A congestion management program shall be developed, adopted, and updated biennially, consistent with the schedule for adopting and updating the regional transportation improvement program, for every county that includes an urbanized area, and shall include every city and the county. The program shall be adopted at a noticed public hearing of the agency. The program shall be developed in consultation with, and with the cooperation of, the transportation planning agency, regional transportation providers, local governments, the department, and the air pollution control district or the air quality management district, either by the county transportation commission, or by another public agency, as designated by resolutions adopted by the county board of supervisors and the city councils of a majority of the cities representing a majority of the population in the incorporated area of the county.

(b) The program shall contain all of the following elements:

(1) (A) Traffic level of service standards established for a system of highways and roadways designated by the agency. The highway and roadway system shall include at a minimum all state highways and principal arterials. No highway or roadway designated as a part of the system shall be removed from the system. All new state highways and principal arterials shall be designated as part of

the system, except when it is within an infill opportunity zone. Level of service (LOS) shall be measured by Circular 212, by the most recent version of the Highway Capacity Manual, or by a uniform methodology adopted by the agency that is consistent with the Highway Capacity Manual. The determination as to whether an alternative method is consistent with the Highway Capacity Manual shall be made by the regional agency, except that the department instead shall make this determination if either (i) the regional agency is also the agency, as those terms are defined in Section 65088.1, or (ii) the department is responsible for preparing the regional transportation improvement plan for the county.

(B) In no case shall the LOS standards established be below the level of service E or the current level, whichever is farthest from level of service A except when the area is in an infill opportunity zone. When the level of service on a segment or at an intersection fails to attain the established level of service standard outside an infill opportunity zone, a deficiency plan shall be adopted pursuant to Section 65089.4.

(2) A performance element that includes performance measures to evaluate current and future multimodal system performance for the movement of people and goods. At a minimum, these performance measures shall incorporate highway and roadway system performance, and measures established for the frequency and routing of public transit, and for the coordination of transit service provided by separate operators. These performance measures shall support mobility, air quality, land use, and economic objectives, and shall be used in the development of the capital improvement program required pursuant to paragraph (5), deficiency plans required pursuant to Section 65089.4, and the land use analysis program required pursuant to paragraph (4).

(3) A travel demand element that promotes alternative transportation methods, including, but not limited to, carpools, vanpools, transit, bicycles, and park-and-ride lots; improvements in the balance between jobs and housing; and other strategies, including, but not limited to, flexible work hours, telecommuting, and parking management programs. The agency shall consider parking cash-out programs during the development and update of the travel demand element.

(4) A program to analyze the impacts of land use decisions made by local jurisdictions on regional transportation systems, including an estimate of the costs associated with mitigating those impacts. This program shall measure, to the extent possible, the impact to the transportation system using the performance measures described in paragraph (2). In no case shall the program include an estimate of the costs of mitigating the impacts of interregional travel. The program shall provide credit for local public and private

contributions to improvements to regional transportation systems. However, in the case of toll road facilities, credit shall only be allowed for local public and private contributions which are unreimbursed from toll revenues or other state or federal sources. The agency shall calculate the amount of the credit to be provided. The program defined under this section may require implementation through the requirements and analysis of the California Environmental Quality Act, in order to avoid duplication.

(5) A seven-year capital improvement program, developed using the performance measures described in paragraph (2) to determine effective projects that maintain or improve the performance of the multimodal system for the movement of people and goods, to mitigate regional transportation impacts identified pursuant to paragraph (4).

The program shall conform to transportation-related vehicle emission air quality mitigation measures, and include any project that will increase the capacity of the multimodal system. It is the intent of the Legislature that, when roadway projects are identified in the program, consideration be given for maintaining bicycle access and safety at a level comparable to that which existed prior to the improvement or alteration. The capital improvement program may also include safety, maintenance, and rehabilitation projects that do not enhance the capacity of the system but are necessary to preserve the investment in existing facilities.

(c) The agency, in consultation with the regional agency, cities, and the county, shall develop a uniform data base on traffic impacts for use in a countywide transportation computer model and shall approve transportation computer models of specific areas within the county that will be used by local jurisdictions to determine the quantitative impacts of development on the circulation system that are based on the countywide model and standardized modeling assumptions and conventions. The computer models shall be consistent with the modeling methodology adopted by the regional planning agency. The data bases used in the models shall be consistent with the data bases used by the regional planning agency. Where the regional agency has jurisdiction over two or more counties, the data bases used by the agency shall be consistent with the data bases used by the regional agency.

(d) (1) The city or county in which a commercial development will implement a parking cash-out program that is included in a congestion management program pursuant to subdivision (b), or in a deficiency plan pursuant to Section 65089.4, shall grant to that development an appropriate reduction in the parking requirements otherwise in effect for new commercial development.

(2) At the request of an existing commercial development that has implemented a parking cash-out program, the city or county shall grant an appropriate reduction in the parking requirements otherwise

applicable based on the demonstrated reduced need for parking, and the space no longer needed for parking purposes may be used for other appropriate purposes.

(e) Pursuant to the federal Intermodal Surface Transportation Efficiency Act of 1991 and regulations adopted pursuant to the act, the department shall submit a request to the Federal Highway Administration Division Administrator to accept the congestion management program in lieu of development of a new congestion management system otherwise required by the act.

65089.1.

(a) For purposes of this section, "plan" means a trip reduction plan or a related or similar proposal submitted by an employer to a local public agency for adoption or approval that is designed to facilitate employee ridesharing, the use of public transit, and other means of travel that do not employ a single-occupant vehicle.

(b) An agency may require an employer to provide rideshare data bases; an emergency ride program; a preferential parking program; a transportation information program; a parking cash-out program, as defined in subdivision (f) of Section 65088.1; a public transit subsidy in an amount to be determined by the employer; bicycle parking areas; and other noncash value programs which encourage or facilitate the use of alternatives to driving alone. An employer may offer, but no agency shall require an employer to offer, cash, prizes, or items with cash value to employees to encourage participation in a trip reduction program as a condition of approving a plan.

(c) Employers shall provide employees reasonable notice of the content of a proposed plan and shall provide the employees an opportunity to comment prior to submittal of the plan to the agency for adoption.

(d) Each agency shall modify existing programs to conform to this section not later than June 30, 1995. Any plan adopted by an agency prior to January 1, 1994, shall remain in effect until adoption by the agency of a modified plan pursuant to this section.

(e) Employers may include disincentives in their plans that do not create a widespread and substantial disproportionate impact on ethnic or racial minorities, women, or low-income or disabled employees.

(f) This section shall not be interpreted to relieve any employer of the responsibility to prepare a plan that conforms with trip reduction goals specified in Division 26 (commencing with Section 39000) of the Health and Safety Code, or the Clean Air Act (42 U.S.C. Sec. 7401 et seq.).

(g) This section only applies to agencies and employers within the

South Coast Air Quality Management District.

65089.2.

(a) Congestion management programs shall be submitted to the regional agency. The regional agency shall evaluate the consistency between the program and the regional transportation plans required pursuant to Section 65080. In the case of a multicounty regional transportation planning agency, that agency shall evaluate the consistency and compatibility of the programs within the region.

(b) The regional agency, upon finding that the program is consistent, shall incorporate the program into the regional transportation improvement program as provided for in Section 65082. If the regional agency finds the program is inconsistent, it may exclude any project in the congestion management program from inclusion in the regional transportation improvement program.

(c) (1) The regional agency shall not program any surface transportation program funds and congestion mitigation and air quality funds pursuant to Section 182.6 and 182.7 of the Streets and Highways Code in a county unless a congestion management program has been adopted by December 31, 1992, as required pursuant to Section 65089. No surface transportation program funds or congestion mitigation and air quality funds shall be programmed for a project in a local jurisdiction that has been found to be in nonconformance with a congestion management program pursuant to Section 65089.5 unless the agency finds that the project is of regional significance.

(2) Notwithstanding any other provision of law, upon the designation of an urbanized area, pursuant to the 1990 federal census or a subsequent federal census, within a county which previously did not include an urbanized area, a congestion management program as required pursuant to Section 65089 shall be adopted within a period of 18 months after designation by the Governor.

(d) (1) It is the intent of the Legislature that the regional agency, when its boundaries include areas in more than one county, should resolve inconsistencies and mediate disputes which arise between agencies related to congestion management programs adopted for those areas.

(2) It is the further intent of the Legislature that disputes which may arise between regional agencies, or agencies which are not within the boundaries of a multicounty regional transportation planning agency, should be mediated and resolved by the Secretary of Business, Housing and Transportation Agency, or an employee of that agency designated by the secretary, in consultation with the air pollution control district or air quality management district within whose boundaries the regional agency or agencies are located.

(e) At the request of the agency, a local jurisdiction that owns, or is responsible for operation of, a trip-generating facility in another county shall participate in the congestion management program of the county where the facility is located. If a dispute arises involving a local jurisdiction, the agency may request the regional agency to mediate the dispute through procedures pursuant to subdivision (d) of Section 65089.2. Failure to resolve the dispute does not invalidate the congestion management program.

65089.3.

The agency shall monitor the implementation of all elements of the congestion management program. The department is responsible for data collection and analysis on state highways, unless the agency designates that responsibility to another entity. The agency may also assign data collection and analysis responsibilities to other owners and operators of facilities or services if the responsibilities are specified in its adopted program. The agency shall consult with the department and other affected owners and operators in developing data collection and analysis procedures and schedules prior to program adoption. At least biennially, the agency shall determine if the county and cities are conforming to the congestion management program, including, but not limited to, all of the following:

(a) Consistency with levels of service standards, except as provided in Section 65089.4.

(b) Adoption and implementation of a program to analyze the impacts of land use decisions, including the estimate of the costs associated with mitigating these impacts.

(c) Adoption and implementation of a deficiency plan pursuant to Section 65089.4 when highway and roadway level of service standards are not maintained on portions of the designated system.

65089.4.

(a) A local jurisdiction shall prepare a deficiency plan when highway or roadway level of service standards are not maintained on segments or intersections of the designated system. The deficiency plan shall be adopted by the city or county at a noticed public hearing.

(b) The agency shall calculate the impacts subject to exclusion pursuant to subdivision (f) of this section, after consultation with the regional agency, the department, and the local air quality management district or air pollution control district. If the calculated traffic level of service following exclusion of these impacts is consistent with the level of service standard, the agency

shall make a finding at a publicly noticed meeting that no deficiency plan is required and so notify the affected local jurisdiction.

(c) The agency shall be responsible for preparing and adopting procedures for local deficiency plan development and implementation responsibilities, consistent with the requirements of this section. The deficiency plan shall include all of the following:

(1) An analysis of the cause of the deficiency. This analysis shall include the following:

(A) Identification of the cause of the deficiency.

(B) Identification of the impacts of those local jurisdictions within the jurisdiction of the agency that contribute to the deficiency. These impacts shall be identified only if the calculated traffic level of service following exclusion of impacts pursuant to subdivision (f) indicates that the level of service standard has not been maintained, and shall be limited to impacts not subject to exclusion.

(2) A list of improvements necessary for the deficient segment or intersection to maintain the minimum level of service otherwise required and the estimated costs of the improvements.

(3) A list of improvements, programs, or actions, and estimates of costs, that will (A) measurably improve multimodal performance, using measures defined in paragraphs (1) and (2) of subdivision (b) of Section 65089, and (B) contribute to significant improvements in air quality, such as improved public transit service and facilities, improved nonmotorized transportation facilities, high occupancy vehicle facilities, parking cash-out programs, and transportation control measures. The air quality management district or the air pollution control district shall establish and periodically revise a list of approved improvements, programs, and actions that meet the scope of this paragraph. If an improvement, program, or action on the approved list has not been fully implemented, it shall be deemed to contribute to significant improvements in air quality. If an improvement, program, or action is not on the approved list, it shall not be implemented unless approved by the local air quality management district or air pollution control district.

(4) An action plan, consistent with the provisions of Chapter 5 (commencing with Section 66000), that shall be implemented, consisting of improvements identified in paragraph (2), or improvements, programs, or actions identified in paragraph (3), that are found by the agency to be in the interest of the public health, safety, and welfare. The action plan shall include a specific implementation schedule. The action plan shall include implementation strategies for those jurisdictions that have contributed to the cause of the deficiency in accordance with the agency's deficiency plan procedures. The action plan need not mitigate the impacts of any exclusions identified in subdivision (f).

Action plan strategies shall identify the most effective implementation strategies for improving current and future system performance.

(d) A local jurisdiction shall forward its adopted deficiency plan to the agency within 12 months of the identification of a deficiency. The agency shall hold a noticed public hearing within 60 days of receiving the deficiency plan. Following that hearing, the agency shall either accept or reject the deficiency plan in its entirety, but the agency may not modify the deficiency plan. If the agency rejects the plan, it shall notify the local jurisdiction of the reasons for that rejection, and the local jurisdiction shall submit a revised plan within 90 days addressing the agency's concerns. Failure of a local jurisdiction to comply with the schedule and requirements of this section shall be considered to be nonconformance for the purposes of Section 65089.5.

(e) The agency shall incorporate into its deficiency plan procedures, a methodology for determining if deficiency impacts are caused by more than one local jurisdiction within the boundaries of the agency.

(1) If, according to the agency's methodology, it is determined that more than one local jurisdiction is responsible for causing a deficient segment or intersection, all responsible local jurisdictions shall participate in the development of a deficiency plan to be adopted by all participating local jurisdictions.

(2) The local jurisdiction in which the deficiency occurs shall have lead responsibility for developing the deficiency plan and for coordinating with other impacting local jurisdictions. If a local jurisdiction responsible for participating in a multi-jurisdictional deficiency plan does not adopt the deficiency plan in accordance with the schedule and requirements of paragraph (a) of this section, that jurisdiction shall be considered in nonconformance with the program for purposes of Section 65089.5.

(3) The agency shall establish a conflict resolution process for addressing conflicts or disputes between local jurisdictions in meeting the multi-jurisdictional deficiency plan responsibilities of this section.

(f) The analysis of the cause of the deficiency prepared pursuant to paragraph (1) of subdivision (c) shall exclude the following:

(1) Interregional travel.

(2) Construction, rehabilitation, or maintenance of facilities that impact the system.

(3) Freeway ramp metering.

(4) Traffic signal coordination by the state or multi-jurisdictional agencies.

(5) Traffic generated by the provision of low-income and very low income housing.

(6) (A) Traffic generated by high-density residential development located within one-fourth mile of a fixed rail passenger station, and

(B) Traffic generated by any mixed use development located within one-fourth mile of a fixed rail passenger station, if more than half of the land area, or floor area, of the mixed use development is used for high density residential housing, as determined by the agency.

(g) For the purposes of this section, the following terms have the following meanings:

(1) "High density" means residential density development which contains a minimum of 24 dwelling units per acre and a minimum density per acre which is equal to or greater than 120 percent of the maximum residential density allowed under the local general plan and zoning ordinance. A project providing a minimum of 75 dwelling units per acre shall automatically be considered high density.

(2) "Mixed use development" means development which integrates compatible commercial or retail uses, or both, with residential uses, and which, due to the proximity of job locations, shopping opportunities, and residences, will discourage new trip generation.

65089.5.

(a) If, pursuant to the monitoring provided for in Section 65089.3, the agency determines, following a noticed public hearing, that a city or county is not conforming with the requirements of the congestion management program, the agency shall notify the city or county in writing of the specific areas of nonconformance. If, within 90 days of the receipt of the written notice of nonconformance, the city or county has not come into conformance with the congestion management program, the governing body of the agency shall make a finding of nonconformance and shall submit the finding to the commission and to the Controller.

(b) (1) Upon receiving notice from the agency of nonconformance, the Controller shall withhold apportionments of funds required to be apportioned to that nonconforming city or county by Section 2105 of the Streets and Highways Code.

(2) If, within the 12-month period following the receipt of a notice of nonconformance, the Controller is notified by the agency that the city or county is in conformance, the Controller shall allocate the apportionments withheld pursuant to this section to the city or county.

(3) If the Controller is not notified by the agency that the city or county is in conformance pursuant to paragraph (2), the Controller shall allocate the apportionments withheld pursuant to this section to the agency.

(c) The agency shall use funds apportioned under this section for projects of regional significance which are included in the capital improvement program required by paragraph (5) of subdivision (b) of Section 65089, or in a deficiency plan which has been adopted by the agency. The agency shall not use these funds for administration or planning purposes.

65089.6.
Failure to complete or implement a congestion management program shall not give rise to a cause of action against a city or county for failing to conform with its general plan, unless the city or county incorporates the congestion management program into the circulation element of its general plan.

65089.7.
A proposed development specified in a development agreement entered into prior to July 10, 1989, shall not be subject to any action taken to comply with this chapter, except actions required to be taken with respect to the trip reduction and travel demand element of a congestion management program pursuant to paragraph (3) of subdivision (b) of Section 65089.

65089.9.
The study steering committee established pursuant to Section 6 of Chapter 444 of the Statutes of 1992 may designate at least two congestion management agencies to participate in a demonstration study comparing multimodal performance standards to highway level of service standards. The department shall make available, from existing resources, fifty thousand dollars ($50,000) from the Transportation Planning and Development Account in the State Transportation Fund to fund each of the demonstration projects. The designated agencies shall submit a report to the Legislature not later than June 30, 1997, regarding the findings of each demonstration project.

65089.10.
Any congestion management agency that is located in the Bay Area Air Quality Management District and receives funds pursuant to Section 44241 of the Health and Safety Code for the purpose of implementing paragraph (3) of subdivision (b) of Section 65089 shall ensure that those funds are expended as part of an overall program for improving air quality and for the purposes of this chapter.

APPENDIX B

CMA Committees, Appeal Process and Administration

COMMITTEES

The CMA has two committees of the Board: the Administration & Legislation Committee and the Plans & Programs Committee. There is also a technical advisory committee.

Administration & Legislation Committee

This committee makes recommendations to the CMA Board on administrative matters such as contracts, the work program, strategic plan, the annual budget and legislation. The committee is comprised of the chair and vice-chair of the Board, four city/county representatives representing each of the four planning areas and a representative of AC Transit and BART.

Plans & Programs Committee

This committee makes recommendations to the CMA Board on the Congestion Management Program, the *Countywide Transportation Plan,* federal and state funding programs and studies by others. The committee is comprised of the chair and vice-chair of the Board, four city/county representatives representing each of the four planning areas and a representative of AC Transit and BART.

Technical Advisory Committee

The Alameda County Transportation Advisory Committee (ACTAC) functions as the technical advisory committee to the CMA. ACTAC is comprised of one staff representative from each city and the county; one staff representative from each transit operator; one staff representative each from the Port of Oakland, Alameda County Transportation Authority, the Metropolitan Transportation Commission, Caltrans and the Bay Area Air Quality Management District. Staff from the cities' and county's public works and planning departments participate on the ACTAC. The executive director of the CMA is the chairperson.

APPEAL PROCESS

A city or the county may appeal actions of the CMA according to the following process. The appealing agency first requests the CMA to reconsider its action. If the CMA either rejects the reconsideration or the appeal, the action of the CMA may be appealed to the member local jurisdictions (cities and the County). An appeal must be filed with the CMA within 30 days of the action being appealed. The CMA must act upon the appeal within 60 days. If the action is appealed, the local jurisdictions will schedule a vote on

the appeal within 60 days following the CMA action on the appeal. The action of the CMA will be overruled if a majority of the local jurisdictions representing a majority of the population of the county takes action to overturn the CMA action. In accordance with the JPA, the CMA has adopted rules and procedures governing the appeal process.

Administrative Costs

The administrative costs of the CMA are paid from levies on each city and the county in proportion to the fuel tax subventions under Proposition 111. The levies are based on the annual budget, which is adopted by April 1 of each year. MTC has entered into contracts with the Bay Area CMAs to assist in meeting the requirements of TEA-21. These revenues have reduced the levy to the cities and county for support of the CMA. The CMA will continue to advocate legislative measures that provide funding for these administrative costs so that fuel tax subventions to local government can be fully employed to address local transportation needs.

APPENDIX C

Levels-of-Service

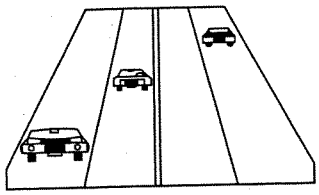
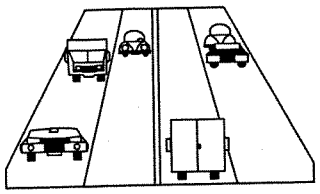
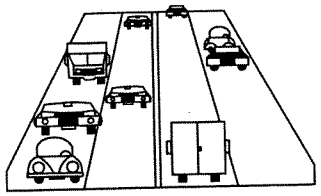
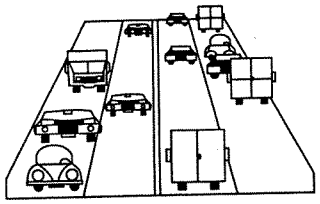
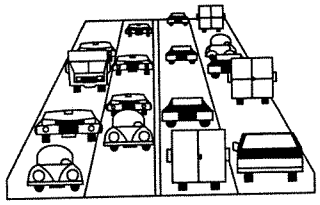
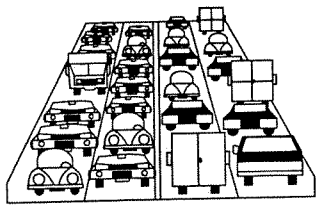
LEVEL OF SERVICE		FLOW CONDITIONS	DELAY	SERVICE RATING
A		Highest quality of service. Free traffic flow with low volumes. Little or no restriction on maneuverability or speed.	None	Good
B		Stable traffic flow, speed becoming slightly restricted. Low restriction on maneuverability.	None	Good
C		Stable traffic flow, but less freedom to select speed or to change lanes.	Minimal	Adequate
D		Approaching unstable flow. Speeds tolerable but subject to sudden and considerable variation. Less maneuverability and driver comfort.	Minimal	Adequate
E		Unstable traffic flow and rapidly fluctuating speeds and flow rates. Low maneuverability and low driver comfort.	Significant	Poor
F		Forced traffic flow. Speed and flow may drop to zero.	Considerable	Poor

Figure B-1

LEVEL OF SERVICE DEFINITIONS

APPENDIX D

Travel-Demand Management Checklist

The Transportation Demand Management Element included in the 1995 Congestion Management Program requires each jurisdiction to comply with the "" Required Program". This requirement can be satisfied in three ways:

- Adoption of "Design Strategies for encouraging alternatives to auto use through local development review" prepared by ABAG and the Bay Area Quality Management District;
- Adoption of new design guidelines that meet the individual needs of the local jurisdictions and the intent of the goals of the TDM Element;
- Evidence that existing policies and programs meet the intent of the goals of the TDM Element.

For those jurisdictions that have chosen to satisfy this requirement by the second or third option the following checklist has been prepared. In order to insure consistency and equity throughout the County, this checklist identifies the components of a design strategy that should be included in a local program to meet the minimum CMP conformity requirements. The required components are highlighted in bold type and are shown at the beginning of each section. A jurisdiction must answer "yes" to each of the required components to be considered consistent with the CMP. Each jurisdiction will be asked to annually certify that it is complying with the TDM Element. Local jurisdictions will not be asked to submit the back-up information to the CMA justifying its response; however it should be available at the request of the public or neighboring jurisdictions.

Questions regarding optional program components are also included. You are encouraged but not required to answer these questions. ACTAC and the TDM Task Force felt that it might be useful to include additional strategies that could be considered for implementation by each jurisdiction.

CHECKLIST

Bicycle Facilities

Goal

To develop and implement design strategies that foster the development of a countywide bicycle program that incorporates a wide range of bicycle facilities to reduce vehicle trips and promote bicycle use for commuting, shopping and school activities. (Note: an example of facilities are bike paths, lanes or racks.)

Local Responsibilities

1a. In order to achieve the above goal, does your jurisdiction have design strategies or adopted policies that include the following:

1a.1 provides a system of bicycle facilities that connect residential and/or non-residential development to other major activity centers?

- ❑ Yes
- ❑ No

1a.2 bicycle facilities that provide access to transit?

- ❑ Yes
- ❑ No

1a.3 that provide for construction of bicycle facilities needed to fill gaps, (i.e. gap closure), not provided through the development review process?

- ❑ Yes
- ❑ No

1a.4 that consider bicycle safety such as safe crossing of busy arterials or along bike trails?

- ❑ Yes
- ❑ No

1a.5 that provide for bicycle storage and bicycle parking for (A) multi-family residential and/or (B) non-residential developments?

- ❑ Yes
- ❑ No

1b. How does your jurisdiction implement these strategies? Please identify.

- ❑ Zoning ordinance
- ❑ Design Review
- ❑ Standard Conditions of Approval
- ❑ Capital Improvement Program
- ❑ Specific Plan
- ❑ Other

Pedestrian Facilities

Goal

To develop and implement design strategies that reduce vehicle trips and foster walking for commuting, shopping and school activities.

Local Responsibilities

2a. In order to achieve the above goal, does your jurisdiction have design strategies or adopted policies that incorporate the following:

2a.1 that provides reasonably direct, convenient, accessible and safe pedestrian connections to major activity centers, transit stops or hubs parks/open space and other pedestrian facilities?

- ❑ Yes
- ❑ No

2a.2 that provide for construction of pedestrian paths needed to fill gaps, (i.e. gap closure), not provided through the development process?

- ❑ Yes
- ❑ No

2a.3 that include safety elements such as convenient crossing at arterials?

- ❑ Yes
- ❑ No

2a.4 that provide for amenities such as lighting, street trees, trash receptacles that promote walking?

- ❑ Yes
- ❑ No

2a.5 that encourage uses on the first floor that are pedestrian oriented, entrances that are conveniently accessible from the sidewalk or transit stops or other strategies that promote pedestrian activities in commercial areas?

- ❑ Yes
- ❑ No

2b. How does your jurisdiction implement these strategies? Please identify.

- ❑ Zoning ordinance
- ❑ Design Review, such as ADA Accessibility Design Standards
- ❑ Standard Conditions of Approval
- ❑ Capital Improvement Program
- ❑ Specific Plan
- ❑ Other

Transit

Goal

To develop and implement design strategies in cooperation with the appropriate transit agencies that reduce vehicle trips and foster the use of transit for commuting, shopping and school activities.

Local Responsibilities

3a. In order to achieve the above goal, does your jurisdiction have design strategies or adopted policies that include the following:

3a.1 provide for the location of transit stops that minimize access time, facilitate intermodal transfers, and promote reasonably direct, accessible, convenient and safe connections to residential uses and major activity centers?

- ❑ Yes
- ❑ No

3a.2 provide for transit stops that have shelters or benches, trash receptacles, street trees or other street furniture that promote transit use?

- ❑ Yes
- ❑ No

3a.3 that includes a process for including transit operators in development review?

- ❑ Yes
- ❑ No

3a.4 provide for directional signage for transit stations and/or stops?

- ❑ Yes
- ❑ No

3a.5 that include specifications for pavement width, bus pads or pavement structure, length of bus stops, and turning radii that accommodates bus transit?

- ❑ Yes
- ❑ No

3.b How does your jurisdiction implement these strategies? Please identify.

- ❑ Zoning ordinance
- ❑ Design Review
- ❑ Standard Conditions of Approval
- ❑ Capital Improvement Program
- ❑ Specific Plan
- ❑ Other

Carpools and Vanpools

Goal

To develop and implement design strategies that reduce the overall number of vehicle trips and foster carpool and vanpool use.

Local Responsibilities

4a. In order to achieve the above goal, does your jurisdiction have design strategies or adopted policies that include the following:

4a.1 For publicly owned parking garages or lots, are there preferential parking spaces and/or charges for carpools or vanpools?

- ❑ Yes
- ❑ No

4a.2 that provide for convenient or preferential parking for carpools and vanpools in non-residential developments?

- ❑ Yes
- ❑ No

4.b How does your jurisdiction implement these strategies? Please identify.

- ❑ Zoning ordinance
- ❑ Design Review
- ❑ Standard Conditions of Approval
- ❑ Capital Improvement Program
- ❑ Specific Plan
- ❑ Other

Park and Ride

Goal

To develop design strategies that reduce the overall number of vehicle trips and provide park and ride lots at strategic locations.

Local Responsibilities

5a. In order to achieve the above goal, does your jurisdiction have design strategies or adopted policies that include the following:

5a.1 promote park and ride lots that are located near freeways or major transit hubs?

- ❑ Yes
- ❑ No

5a.2 a process that provides input to Caltrans to insure HOV by-pass at metered freeway ramps?

- ❑ Yes
- ❑ No

5b. How does your jurisdiction implement these strategies? Please identify.

- ❑ Zoning ordinance
- ❑ Design Review
- ❑ Standard Conditions of Approval
- ❑ Capital Improvement Program
- ❑ Specific Plan
- ❑ Other

APPENDIX E

Federal and State Transportation Control Measures

The following lists include adopted federal and state transportation control measures (TCMs) for the San Francisco Bay Area. Detail on federal TCMs can be found in the Transportation Improvement Program (MTC) and the 1994 Clean Air Plan (BAAQMD).

Table 22 — Transportation Control Measures in the ~~the State Implementation Plan~~2001 Federal Bay Area Ozone – Attainment Plan

TCM	Description
Original TCMs from 1982 Bay Area Air Quality Plan	
TCM 1	Reaffirm Commitment to 28 percent Transit Ridership Increase Between 1978 and 1983
TCM 2	Support Post-1983 Improvements in the Operators' Five-Year Plans and, After Consultation with the Operators, Adopt Ridership Increase Target for the Period 1983 through 1987
TCM 3	Seek to Expand and Improve Public Transit Beyond Committed Levels
TCM 4	Continue to support development of High Occupancy Vehicle (HOV) Lanes ~~and Ramp Metering~~
TCM 5	Support RIDES Efforts
TCM 6*	Continue Efforts to Obtain Funding to Support Long Range Transit Improvements
TCM 7	Preferential Parking
TCM 8	Shared Use Park and Ride Lots
TCM 9	Expand Commute Alternatives ~~Program~~
TCM 10	Information Program for Local Governments
TCM 11**	Gasoline Conservation Awareness Program (GasCAP)
TCM 12**	Santa Clara County Commuter Transportation Program

TCM	Description
Contingency Plan TCMs Adopted by MTC in February 1990(MTC Resolution 2131)	
TCM 13	Increase Bridge Tolls to $1.00 on All Bridges
TCM 14	Bay Bridge Surcharge of $1.00
TCM 15	Increase State Gas Tax by 9 Cents
TCM 16*	Implement MTC Resolution 1876, Revised — New Rail Starts – BART Extension to Colma only
TCM 17	Continue October 1989 Post-Earthquake Transit Services
TCM 18	Sacramento-Bay Area Amtrak Service
TCM 19	Upgrade Caltrain Service
TCM 20	Regional HOV System Plan
TCM 21	Regional Transit Coordination
TCM 22	Expand Regional Transit Connection ~~Ticket Distribution~~Services
TCM 23	Employer Audits
TCM 24	Expand Signal Timing Program to New Cities
TCM 25	Maintain Existing Signal Timing Programs on Local Streets
TCM 26	Incident Management on Bay Area Freeways
TCM 28	Local Transportation Systems Management (TSM) Initiatives
TCM 27	Update MTC Guidance on Development of Local TSM Programs
~~TCM A~~	~~Regional Express Buss Program~~
~~TCM B~~	~~Bicycle/Pedestrian Program~~
~~TCM C~~	~~Transportation for Livable Communities/Housing Incentives Program~~
~~TCM D~~	~~Additional service patrol~~
~~TCM E~~	~~Transit access to airports~~
TCM A	Regional Express Buss Program
TCM B	Bicycle/Pedestrian Program
TCM C	Transportation for Livable Communities/Housing Incentives Program
TCM D	Additional service patrol
TCM E	Transit access to airports

TCM	Description
~~TCM 28~~	~~Local Transportation Systems Management (TSM) Initiatives~~

* Deleted by EPA action from ozone plan.

** Deleted by EPA action from ozone plan, but retained in Carbon Monoxide Maintenance Plan.

Source: Bay Area Air Quality Management District, Metropolitan Transportation Commission, 2001.

Table 23 — Transportation Control Measures in the ~~2000~~ Clean Air Plan

TCM 1: Support Voluntary Employer Based Trip Reduction Programs
TCM 2: Adopt Employer-Based Trip Reduction Rule (DELETED)
TCM 3: Improve Areawide Transit Service
TCM 4: Improve Regional Rail Service
TCM 5: Improve Access to Rail and Ferries
TCM 6: Improve Interregional Rail Service
TCM 7: Improve Ferry Service
TCM 8: Construct Carpool/Express Bus lanes on Freeways
TCM 9: Improve Bicycle Access and Facilities
TCM 10: Youth Transportation ~~(includes Clean Fuel School Buses)~~
TCM 11: Install Freeway/ Arterial Metro Traffic Operations System
TCM 12: Improve Arterial Traffic Management
TCM 13: Transit Use Incentives
TCM 14: Improve Rideshare/Vanpool Services and Incentives
TCM 15: Local Clean Air Plans, Policies and Programs
TCM 16: Intermittent Control Measure/Public Education
TCM 17: Conduct Demonstration Projects
TCM 18: Transportation Pricing Reform
TCM 19: ~~Advocate Planning and Design of Projects to Facilitate~~ Pedestrian Travel
TCM 20: Promote Traffic Calming Measures

APPENDIX GA

Technical and Policy Guidelines

USE OF THESE GUIDELINES

Local jurisdictions are required to comply with standards set forth in the Alameda County Congestion Management Agency's (CMA) *Congestion Management Program* (CMP). These *Technical and Policy Guidelines* are intended to assist jurisdictions in complying with such standards. The guidelines are organized as follows:

- Level-of-service monitoring;
- Transportation demand management;
- Land use analysis;
- Deficiency plan preparation; and
- Countywide Transportation Demand Modeling.

These Guidelines supplement the CMP and supercede requirements contained in all previous Programs and Guidelines, and will continue to be updated periodically to reflect new guidance adopted by the CMA Board.

1. LEVEL-OF-SERVICE MONITORING

Background and Purpose

"Level-of-service" (LOS) is a term used to describe traffic conditions on a given roadway. LOS takes into account variables such as travel speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, safety, road volume and road capacity.

Setting LOS standards for the CMP transportation system provides a tool to analyze the impacts of land use changes on the system and to measure one aspect of system performance—congestion. If performance falls below the standard discussed below, local jurisdictions are required to restore or improve the LOS.

Responsibility

By November of each year, the CMA is required to determine whether local jurisdictions are in compliance with the CMP. LOS monitoring is required only for segments operating at LOS C, D, E or F unless the local jurisdiction requires otherwise.

Jurisdictions may use CMA's LOS monitoring, or may conduct their own LOS monitoring. If a jurisdiction assumes responsibility for monitoring LOS on their roads or if Caltrans assumes responsibility for monitoring LOS on the freeway system, the following methodology should be used. *Note*: The results of the 2002 LOS monitoring efforts, and a complete description of the methodology for data collection and analysis, are included in the 2002 LOS Monitoring Program[1].

Methodology

Measuring LOS is based on average travel speed, using the "floating car" technique consistent with the *Manual of Traffic Engineering Studies*[2]. This method involves defining the checkpoints for each roadway segment, collecting travel time data, computing travel speeds and comparing average speeds with the LOS speed ranges specified in the 1985 *Highway Capacity Manual*[3]. The relationship between LOS and average travel speed is shown in Table 5 of the CMP.

Defining Roadway Segments

To ensure comparability of results for conformance determination purposes, LOS monitoring must be based on the roadway network segments established in the most current CMP. In cases where compelling reasons exist, local jurisdictions may request changes to network definition. The CMA and Alameda County Technical Advisory Committee (ACTAC) must approve such a change before LOS monitoring begins.

Monitoring Frequency

The Alameda County CMA surveys the entire CMP-network every four years (or two monitoring cycles) to determine if LOS A and B segments are experiencing more congestion. The ACCMA monitors segments operating at LOS C, D, E or F biennially, and has the option of including segments experiencing LOS A and B during this biennial monitoring.

2. TRANSPORTATION DEMAND MANAGEMENT

Background and Purpose

Transportation demand management (TDM) focuses on "demand-related" strategies designed to reduce the need for new highway facilities over the long term and to make the most efficient possible use of

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[1] Abrams Associates, *2002 Level-of-Service Monitoring*, (Oakland, November 2002). This document is available at the CMA offices and electronically at www.accma.gov.

[2] Paul C. Box and Joseph C. Oppenlander, *Manual of Traffic Engineering Studies,* 4th edition (Arlington, VA: Institute of Transportation Engineers, 1976).

[3] Transportation Research Board, Special Report 209, *Highway Capacity Manual,* (Washington, D.C.: Transportation Research Board, 1985)

existing facilities. TDM also incorporates strategies to integrate air quality planning requirements with transportation planning and programming. Based on state law, [4] the purpose of the TDM Element in the CMP is to:

- Promote alternative transportation methods, including but not limited to carpools, vanpools, transit, bicycles and park-and-ride lots;
- Promote improvements in the balance between jobs and housing;
- Promote other strategies, including but not limited to flexible work hours, telecommuting and parking management programs; and
- Consider parking cash-out programs.[5]

The CMA and Bay Area Air Quality Management District (BAAQMD) are required to coordinate the development of trip-reduction responsibilities and avoid duplication of responsibilities between agencies. However, cities and other local jurisdictions can establish their own TDM programs that go beyond the CMA and BAAQMD strategies, but they cannot require employers to implement an employee trip-reduction program unless the program is required by federal law.[6]

Elements of a TDM Program

The TDM program includes four elements:

- Required Program. Mandates that local jurisdictions adopt and implement guidelines for site design that enhance transit, pedestrian and bicycle access.
- Countywide Program. Includes actions by the CMA to support the efforts of local jurisdictions.
- Regional Program. Includes actions by Metropolitan Transportation Commission (MTC), BAAQMD and Caltrans to meet areawide needs.
- Comprehensive Program. Recognizes the role of the private sector TDM opportunities.

Compliance with the Required Program

Mandatory compliance with the Required Program can be satisfied in one of three ways:

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[4] California Government Code Section 65089 (b) (3).

[5] A parking cash-out program is defined as an employer-funded program under which an employer offers to provide a cash allowance to an employee equivalent to the parking subsidy that the employer would otherwise pay to provide the employee with a parking space.

[6] Section 40929, added to the Health and Safety Code by SB 437 (Lewis) states: 40929 (a) Notwithstanding Section 40454, 40457, 40717, 40717.1, or 407717.5, or any other provision of law, a district, congestion management agency, as defined in subdivision (b) of Section 65099.1 of the Government Code, or any other public agency shall not require an employer to implement an employee trip reduction program unless the program is expressly required by federal law and the elimination of the program will result in the imposition of federal sanctions, including, but not limited to, the loss of federal funds for transportation purposes. (b) Nothing in this section shall preclude a public agency from regulating indirect sources in any manner that is not specifically prohibited by this section, where otherwise authorized by law.

- Adopt "Design Strategies for Encouraging Alternatives to Auto Use through Local Development Review," prepared by Association of Bay Area Governments (ABAG) and the BAAQMD;
- Adopt new design guidelines that meet the individual needs of the local jurisdictions and the intent of the goals of the TDM Element; or
- Provide evidence that the jurisdiction's existing policies and programs meet the intent of the TDM Element goals.

The Design Strategies Checklist available at CMA ~~found in Appendix has~~office has been prepared for jurisdictions choosing to satisfy this requirement using the second or third option, above. This checklist identifies the components of a strategy that should be included in a local program to meet the CMP conformity requirements.

Local jurisdictions must provide proof of compliance annually in September prior to the November CMA Board meeting in which conformity is determined. (Note: See Table 18 for other conformance and monitoring schedule requirements).

3. LAND USE ANALYSIS PROGRAM

Background and Purpose

The purpose of the CMP Land Use Analysis Program is to:

- Ensure that local land use and regional transportation facility decisions are consistent;
- Assess the impacts of development in one community on other communities; and
- Promote information sharing between local governments when the decisions made by one jurisdiction may have an impact on another.

Tier I Projects

Reporting Requirements

Tier I projects are categorized as Tier I (a) and Tier I (b). A General Plan Amendment (GPA) is a Tier I(a) project and any Large-Scale Project Consistent with the General Plan[7] is a Tier I(b) project. Jurisdictions must report all Tier I projects to the CMA for regional transportation analysis.

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7 In February 1995, The CMA adopted the following policy for addressing Tier I (b) projects:

> That all NOPs of Environmental Impact Reports be forwarded to the CMA for comparison with the 100-trip p.m. peak threshold and, if exceeded, the CMA will review and comment including requests for consideration of transportation impacts and mitigation measures to Metropolitan Transportation System facilities in the same manner as the current policy for general plan amendments.

Throughout the year, local jurisdictions are to forward to the CMA all Notices of Preparation (NOP) and draft, supplemental and final environmental documents with specified information on Tier I (a) and Tier I (b) projects with one exception: NOPs for Tier I (b) projects, for which a negative declaration is being prepared, do not need to be forwarded to the CMA. All supporting documentation and relevant data should be provided to the CMA within the initial scoping period specified by the California Environmental Quality Act (CEQA).

Submittal Requirements

Local jurisdictions must submit the land development application (study report/site plan for the proposed project or GPA) to the CMA, including:

- Description and map of the project location;
- Location of proposed street access and relationship to the Metropolitan Transportation System (MTS) roadway system;[8]
- Traffic studies prepared for the project;
- Description of proposed uses (single-family or multi-family dwelling units, low-income senior housing units, etc.);
- Quantification of the uses such as the number of dwelling units, number of stories of multiple story buildings, square feet of commercial use, number of employees by job types (manufacturing, retail, service, etc.);
- Expected occupancy date (year), or, if a multi-phase project, the expected occupancy dates for each phase; and
- Degree of completion (e.g. occupancy) by the CMP Capital Improvement Program (CIP) target year.[9]

Model Requirements

The CMA reviews transportation analyses of proposed land developments that require a general plan amendment and/or an environmental impact report. The CMA determines whether the proposed development would result in 100 additional p.m. peak hour trips. If so, the CMP Land Use Analysis Program requires the jurisdiction to conduct a traffic analysis of the project using the Countywide Transportation Demand Model.

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[8]California Government Code requires that the Land Use Analysis Program assess the impacts of land development on "regional transportation systems." In the Bay Area, the regional transportation system is defined as the Metropolitan Transportation System (MTS), which has been officially designated by the Metropolitan Transportation Commission as part of its implementation of the 1991 federal Intermodal Surface Transportation Efficiency Act. Therefore, a distinction is made between the CMP roadway network that is used for LOS Monitoring of existing conditions (see Chapter 3~~4~~, Level Of Service Standards~~OS Monitoring Guidelines~~) and the MTS system used for the CMP Land Use Analysis Program to determine impacts to the regional transportation system in the future. (By using the MTS for the Land Use Analysis Program, impacts on the CMP-network system will continue to be identified, since the latter is a subset of the MTS.)

[9]The CMP CIP target year is the last year covered in the five-year Capital Improvement Program for a given CMP. For example, the 2001 CMP target year would be 2006/07.

The Countywide Model has been updated to Projections 2002 for estimated base year 2005 with horizon years 2010 and 2025[10]. Local jurisdictions are responsible for conducting the model runs themselves or through a consultant. The Countywide model is available to the local jurisdictions for this purpose. A letter must be submitted to the CMA requesting use of the model and describing the project. A copy of a sample letter agreement is available from the CMA upon request

Jurisdictions must address all potential impacts of the project on the Metropolitan Transportation System (MTS) roadway and transit systems. The ACCMA does not have a policy for determining a threshold of significance for CMP requirements. Rather, it is expected that professional judgment will be applied to determine project level impacts.

- **Tier I (a) and (b) Land Development Application**. The local jurisdiction or their consultant must model forecasts for study horizon years 2010 and 2025 traffic volume-to-capacity ratios and traffic volumes. The CMA will use the forecasts to determine whether the proposal exceeds the trip-generation threshold—defined as 100 or more additional p.m. peak-hour trips over what is generated by the current land use designation for Tier I (a) and by the existing land uses for Tier I (b).
- **Tier I (a) GPAs and Large-Scale Projects Consistent with the General Plan.** If the 100 p.m. peak-hour trip-generation threshold is exceeded, local jurisdictions or their consultants must model the impact of the project (and a "no project" scenario) on the MTS roadway system for study horizon years 2010 and 2025.
- **Tier I (a) or (b) Projects**. If the 100 p.m. peak-hour trip-generation threshold is not exceeded, the CMA will write a letter of exemption to the local jurisdiction.

The local jurisdiction must send a copy of the final decision/notice of determination to the CMA within 14 days of application approval. The data will be incorporated into the Countywide Transportation Demand Model's land use database, thus keeping it current.

Tier II Projects

Biennially, the CMA analyzes Tier II projects based on new land use projections issued by ABAG (typically in even-numbered years).[11] Local jurisdictions have 60 days after receiving the projections in which to provide input on how their respective ABAG projections will be distributed by Countywide Transportation Demand Model traffic analysis zones (TAZs). Then the CMA will incorporate this information into the updated Countywide Transportation Demand Model.

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[10] The Countywide Transportation Demand Model is updated following ABAG's issuance of new land use projections, usually every two years. The model horizon years are modified with the biennial model updates.

[11] In March 2003, ABAG adopted *Projections* 2003, a shift away from its traditional "trends series" to one based more on "Smart Growth" concepts. MTC intends to use this most recent series in the update of the *Transportation 2030*, which began in Spring 2003. If this is the case, then it is likely that the new land use projections will be released in odd-numbered years beginning in 2003.

Other Programs to Reduce Congestion

Two programs, supported by the CMA, should be considered by local jurisdictions as additional ways to comply with the CMP Land Use Analysis Program.

Financial Incentives

As part of the terms of approval and/or developer agreements, financial incentive programs can help reduce traffic congestion. Employee-oriented financial incentives such as parking cash-out programs have proven to be successful in encouraging single-occupant drivers to choose other commute alternatives. For example, under this program, an employer offers to provide a cash allowance equivalent to the parking subsidy that the employer would otherwise pay to provide the employee with a parking space. Such a program applies to employers of 50 or more persons in air basins designated as "nonattainment" areas.[12]

Guaranteed Ride Home Program

The Guaranteed Ride Home program, sponsored by the CMA, ensures that any employee at participating worksites using alternative modes of travel can get home in case of an emergency. This program works in conjunction with other transportation demand management programs to reduce the number of drive-alone work trips made in Alameda County. The program is open to any Alameda County employer with 100 or more employees and provides employees who carpool, vanpool, use public transportation, bike or walk to work a free ride home in the event of an emergency or unexpected overtime. By alleviating employees' fears about being "stranded" at work, the program provides a strong incentive for them to leave their cars at home and instead use carpools, vanpools or public transit to get to work.

4. DEFICIENCY PLAN GUIDELINES

Background and Purpose

Deficiency Plans are a way for jurisdictions to remain in compliance with the CMP. This process is initiated when LOS for a segment of road deteriorates below the established standard set forth in the California Government Code Section 65089 (b)(1)(B), as follows:

> In no case shall the LOS standards for roads established be below the LOS E or at the current level, whichever is further from LOS A. When the LOS on a segment or at an intersection fails to attain the established LOS standard, a Deficiency Plan shall be adopted pursuant to Section 65089.4.

Deficiency Plans should always be developed with consideration of the countywide transportation planning process, including forecasts of travel needs and planned capital improvements. Likewise, existing deficiencies should always influence future countywide transportation planning and programming decisions. If the Deficiency Plan involves system-wide improvements, CMA staff, transit agencies, the BAAQMD, and the California Department of Transportation may also be involved.

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[12] Section 43845 of the Health and Safety Code. The EPA determines whether air basins are in attainment.

Deficiency Identification

~~Biennially~~Biennially, the CMA identifies potentially deficient roadway segments based on LOS monitoring. Only trips originating inside Alameda County in the p.m. peak period are included in determining LOS conformity. The CMA also allows several types of travel to be removed from the determination, including:

- Interregional travel;
- Construction, rehabilitation, or maintenance of facilities that impact the system;
- Freeway ramp metering;
- Traffic signal coordination by the state or a multi-jurisdictional agency;
- Traffic generated by the provision of low and very low income housing;
- Traffic generated by high-density residential development within one-fourth mile of a fixed rail passenger station; and
- Traffic generated by any mixed use development located within one-fourth mile of a fixed rail passenger station; and if more than half of the land area or floor area of the mixed use development is used for high density residential housing.

In some cases, several jurisdictions are required to participate in a multi-jurisdictional Deficiency Plan process pursuant to Section 65089.4 (e) (1-3).

Process Overview

When the LOS on a given CMP-network segment deteriorates below the established state standard, the responsible jurisdictions(s) must prepare a Deficiency Plan, or forego additional gasoline tax subventions (pursuant to Section 2105 of the Streets and Highways Code). The CMA Board determines whether a jurisdiction is required to prepare a Deficiency Plan at their November Board meeting. The jurisdiction must prepare a Deficiency Plan by the following November Board meeting to prevent its forfeiting of additional gasoline tax subventions.

The Deficiency Plan process allows a local jurisdiction to choose one of two types of Deficiency Plans.

- **Simple Deficiency Plan**. Focusing on the deficient segment, the local jurisdiction develops a list of improvements necessary to meet LOS standards, and estimates the costs and implementation schedule of the proposed improvements. For a simple Deficiency Plan, measures to meet minimum LOS on the deficient segment do not have to be drawn from the BAAQMD list nor approved by the BAAQMD.
- **Multipurpose Deficiency Plan**. A more complex Deficiency Plan may be required when a deficient segment cannot be improved to meet LOS standards. The jurisdiction must designate the segment as deficient, and develop and implement actions to measurably improve the overall LOS and contribute to significant air quality improvements. Such actions may not necessarily directly pertain to or have a measurable impact on the deficient segment itself but must show system-wide improvement. The plan

should also contain an estimate of the costs of the proposed improvements, programs or actions.

For these types of plans, the BAAQMD has developed a list of actions which are considered beneficial for air quality and congestion management. Jurisdictions may include actions other than those on this list, provided the BAAQMD reviews and approves the list prior to plan adoption. The most current BAAQMD list of actions should always be consulted.

Note: A local jurisdiction may request, at any time while preparing a Deficiency Plan, that the conflict resolution process be instituted to resolve disputes, as necessary, and as set forth in the CMP.

Plan Development and Approval

Required Components

The scope of a Deficiency Plan should match the severity of the problem. Extreme deficiencies will need more significant actions; minor deficiencies need only minor actions. Action plans must be incorporated into future CMP documents. State law requires a Deficiency Plan contain and address the following:

- **Introduction and Setting**. A short description of the facility, including a map showing its location.
- **Deficiency Analysis**. The deficiency must be analyzed and described in terms of likely causes and the magnitude of the deficiency assessed.[13]
- **Screening of Actions**. An array of suitable actions should be evaluated at a sketch-planning level for potential effects on system-wide traffic congestion and air quality (traffic operations analyses or model forecasts may be required).
- **Suitable Actions**. Selected actions meant to remedy the specific deficiency should be detailed. If actions are considered which are intended to improve LOS on the CMP-network, those actions—listed in the BAAQMD guidelines and other actions identified and approved by the BAAQMD—should be given a suitability assessment.
- **Implementation**. A detailed implementation plan should be developed, including description of the selected actions, anticipated costs, related funding sources and schedule.

Suitable Implementation Actions

Implementation actions fall into one of two categories:

- **Mitigation of Deficiency**. These types of improvements are designed to directly mitigate the specific deficiency such as highway, transit and other mode improvements.

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[13] The magnitude of the deficiency shall be defined as:

> The capacity constraint that prevents a roadway from operating at its appropriate level of speed. When biennial data become available through the LOS monitoring program, facility specific data on the relationship between volume and speed will allow for better definition of the magnitude of the deficiencies.

- **Improve Air Quality/LOS**. The second types of actions are intended to provide measurable improvements to air quality and LOS, in cases where deficiencies cannot be mitigated directly.

Updates

To facilitate the process, the CMA Board will accept minor updates to Deficiency Plans. The affected jurisdictions(s) may submit a notice to the CMA stating the reason for and content of the update. The CMA Board will approve or reject the request for the update. Should the CMA Board reject the request, the existing Deficiency Plan will remain in place.

Review and Evaluation

An acceptable Deficiency Plan will contain all of the required components listed above and will be evaluated on the following technical criteria:

- Completeness as required in California Government Code Section 65089.5;
- Appropriateness of the Deficiency Plan actions in relation to the magnitude of the deficiency;
- Reliability of the funding sources;
- Ability to implement the proposed actions (including jurisdictional control issues); and
- Reasonableness of the implementation plan schedule.

CMA staff and ACTAC members will review the draft Deficiency Plan. These groups will coordinate with the local jurisdiction (when the jurisdiction desires) to develop a Deficiency Plan acceptable to that jurisdiction and to the CMA. In the case of a multi-jurisdictional Deficiency Plan, the CMA staff and ACTAC will coordinate with the affected local jurisdictions, upon request.

Adoption

A final plan must be adopted by the affected local jurisdiction(s) at a noticed public hearing no later than 90 days following written notification of the annual conformance findings of the CMA Board (presently scheduled to occur at the November CMA Board meeting). The CMA Board will approve or reject a Deficiency Plan within 60 days of receipt of the Deficiency Plan from the local jurisdiction(s).

Jurisdictional Participation

Jurisdictions may be involved in two types of Deficiency Plans.

Single-Jurisdiction Deficiency Plan

If a deficient segment is entirely in one jurisdiction and all other jurisdictions contribute less traffic than is identified in the multi-jurisdictional Deficiency Plan process (discussed below), then the deficiency should be addressed through a local single-jurisdiction Deficiency Plan.

Multi-Jurisdictional Deficiency Plan

If a deficient segment crosses jurisdictional boundaries, borders two jurisdictions or if conditions in other jurisdictions contribute significantly[14], the deficiency must be addressed through a multi-jurisdictional Deficiency Plan pursuant to Section 65089.4 (e) (1-3).

Monitoring

Annually, the CMA will monitor implementation of the Deficiency Plans prior to the annual conformance determination (currently scheduled for November), to establish whether:

- They are being executed according to the schedule detailed in the implementation plan; or
- Changes have occurred that require modifications of the original Deficiency Plan or schedule.

Jurisdictions that have prepared and are implementing a Deficiency Plan must prepare annual status report updates for the November Board meeting. Cooperating jurisdictions that did not prepare the Deficiency Plan must also review the annual status report updates and submit a letter to the CMA stating they are in concurrence with the annual update from the lead jurisdiction. This information is required for the Board to make a determination at its November meeting whether the jurisdictions are in conformance with the CMP.

Compliance

Once the action plan identified in the Deficiency Plan is implemented, the local jurisdiction determines whether a measurable improvement in LOS has occurred or whether the plan needs to be further updated. Evaluation of the action plan may result in recommended changes to other elements of the CMP, such as the Capital Improvements Program or Travel Demand Management Element.

A jurisdiction which is either not implementing the actions or not adhering to the stated schedule in the approved Deficiency Plan may be found in non-conformance, if the deficiency still exists.

[14] A significant contribution is defined as one that contributes 10% or more of the volume of traffic in that segment.

5. COUNTYWIDE TRANSPORTATION DEMAND MODEL

Background and Purpose

California Government Code requires that every Congestion Management Agency, in consultation with the regional transportation planning agency (MTC in the San Francisco Bay Area), cities and the County, develop a Countywide Transportation Demand Model. The purpose of this requirement is to establish a uniform technical basis for analysis and to assist local agencies in assessing the impacts of new development on the regional transportation system.

Description of the Countywide Transportation Demand Model

The nine-county San Francisco Bay Area region and areas surrounding the Bay Area are included in the travel demand model. Within Alameda County, the Countywide Transportation Demand Model is based on and incorporates refinements to MTC's traffic analysis zone (TAZ) system.

Model Adequacy

The Countywide Model has been tested and validated for 1990 conditions. This procedure compared forecast results from the model to observed traffic volumes and transit ridership data. The model has been further refined with the addition of updated land use information and network characteristics submitted biennially to the CMA by local jurisdictions as part of ABAG's projections update, with the latest update in 2002.

Census 2000 transportation data became available in 2003. The CMA is considering updating the model to 2000 conditions. This update is anticipated for 2004 and 2005 in conjunction with the update of MTC's model to 2000 base year conditions.

Applications of the Countywide Model

The Countywide Model provides information to analyze operating conditions on any segment of the Alameda County roadway and transit system. Specifically, it can produce countywide information for 2005 estimated base year with study horizon years of 2010 and 2025[15]. It can be used to estimate existing and future operating conditions on the CMP roadway system such as:

- Land use impacts and mitigation measures related to the CMP Land Use Analysis Program;
- The effect of projects proposed in the CMP Capital Improvement Program;
- Recommended actions or mitigation measures for Deficiency Plans; and
- Forecasting operating conditions on specific roadway segments.

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[15] The base years and horizon years are generally updated every two years with the Countywide Transportation Demand Model update.

Traffic Analysis for Proposed Projects

When a proposed project appears to generate at least 100 p.m. peak hour trips over existing conditions, the CMP Land Use Analysis Program requires the sponsoring local jurisdiction to submit land use data to enable the CMA to conduct a traffic analysis of the project using the Countywide Transportation Demand Model. (See discussion in Section 3, Land Use Analysis Program, Model Requirements.) Potential impacts of the proposed project on the Metropolitan Transportation System would need to be addressed in the draft Environmental Impact Report.

Use of Countywide Transportation Demand Model

Since1998, local jurisdictions have been responsible for conducting model runs themselves or through a consultant.[16] The Countywide Model is available to local jurisdictions to run travel demand models through formal request. Before the Model can be released to the jurisdiction or its' consultant, a letter (signed by representatives from the jurisdiction and its consultant, if applicable) must be submitted to the CMA for each project, requesting use of the model and describing the project (sample of Model Agreement letter is available upon request).

The CMA Countywide Transportation Demand Model may be used for the following CMP-related uses:

- Forecasting of operating conditions on roadway segments;
- Local land use analysis testing and updating consistent with the current CMP Land Use Analysis Program requirements; and
- Testing of mitigation measures or Deficiency Plan recommendations.

Copies of the Countywide Model input assumptions, databases and plots of the roadway and transit systems are available from the CMA upon request (in paper or electronic copies).

CMP Annual Conformity Findings

Jurisdictions, therefore, need to submit information to the CMA demonstrating they are in compliance with the following:

1. Land Use Analysis Program
2. TDM Site Design Checklist
3. Deficiency Plan or Update (for some jurisdictions, as discussed above)
4. Payment of Annual Fees to CMA

The CMA reviews the draft conformity findings at each October Board meeting. The City's compliance with the Tier II Land Use Analysis Program depends on providing this information by the November

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[16] The Countywide Transportation Demand Model must be consistent with, to the greatest extent possible, MTC's modeling methodology and databases and the Countywide Transportation Demand Model for Compatibility Checklist.

CMA Board meeting. If the jurisdiction is not in conformance by the November CMA Board meeting, it could jeopardize its gas tax funding.

State Requirements

While the CMA does not have the authority to approve or deny local developments, it may find the local jurisdiction in non-conformance with the Land Use Analysis Program requirement of the CMP. At the time of the finding, the CMA would provide recommendations for corrective actions.

If after 90 days of notification, the local jurisdiction is still in non-conformance with the Land Use Analysis Program requirement of the CMP, the CMA is required to provide notice to the California Transportation Commission and the State Controller. The notice includes the reasons for the finding and evidence that the CMA correctly followed procedures for making the determination. The State Controller would then withhold the non-conforming jurisdiction's increment of subventions from the fuel tax made available by Proposition 111, and the jurisdiction will not be eligible to receive funding for projects through the federal Surface Transportation Program and Congestion Mitigation & Air Quality Program. If within the 12-month period following the receipt of a notice of non-conformance, the CMA determines that the city or county is in conformance with the Land Use Analysis requirement of the CMP, the withheld Proposition 111 funds will be released. If after the 12-month period the city or county has not conformed, the withheld Proposition 111 funds will be released to the CMA for projects of regional significance included in the CMP or a deficiency plan.

APPENDIX ~~H~~G

Glossary of Terms

AB 84. The original bill number for the legislation that required Project Study Reports (PSRs) and the development of Future Project Development lists by the counties.

Air Quality Attainment Plan. The plan for attainment of state air quality standards, as required by the California Clean Air Act of 1988. It is adopted by air quality districts and subject to approval by the State Air Resources Board.

Association of Bay Area Governments (ABAG). The regional agency that is responsible for regional planning other than for transportation. ABAG publishes forecasts of projected growth for the region.

Average Daily Traffic (ADT). The average number of vehicles passing a specified point during a 24-hour period.

Bay Area Air Quality Management District (BAAQMD). The regional agency created by the state legislature for the Bay Area air basin (Alameda, Contra Costa, western Solano, southern Sonoma, Marin, Napa, San Francisco, San Mateo, Santa Clara counties) that develops, in conjunction with MTC and ABAG, the state and federal air quality plans for the region. BAAQMD has an active role in approving the TCM (see definition below) plan for the region, as well as in controlling stationary and indirect sources of air pollution.

Bid targets. Based on the county minimum formula, each county is limited in the amount of funds that can be requested from the state in a given STIP cycle. This limit is called the bid target. In a multi-county region such as MTC, bid targets can be pooled to give additional flexibility at the regional level. MTC also uses bid targets for the federal Surface Transportation Program.

California Transportation Commission (CTC). A body appointed by the Governor and confirmed by the legislature that considers Regional Transportation Improvement Programs (RTIPs) and the PSTIP (see definitions below) and then includes transportation projects from these programs into the State Transportation Improvement Program (STIP). This qualifies the projects for state funding. The CTC also has financial oversight over the major programs authorized by Propositions 111 and 108.

Caltrans -- The California State Department of Transportation. Responsible, as the owner/operator of the state highway system, for its safe operation and maintenance. Proposes projects for Intercity Rail, Interregional Roads, and soundwalls in the PSTIP (see definition below). Also responsible for the HSOPP (see definition below), Toll Bridge, and Aeronautics programs. The TSM and State/Local

Partnership Programs are administered by Caltrans. Caltrans is the implementing agency for most state highway projects, regardless of program, and for the Intercity Rail program.

Capital Improvement Program (CIP). As used in this document: A seven-year program of projects to maintain or improve the traffic level of service and performance measures developed by the CMP, and to mitigate regional transportation impacts identified by the CMP Land Use Analysis Program, which conforms to transportation-related vehicle emissions air quality mitigation measures.

Capital Outlay. "All money allocated by the CTC from the State Highway, Account, and the net revenues from the passenger rail transportation Bond Fund for streets, highways, guideways, and rail, but not including allocations or expenditures for projects for maintenance, traffic system management, intercity rail, and the state-local partnership program, which are expended for construction, including the acquisition of rights-of-way, reconstruction, and construction engineering." (Streets and Highways Code 188.)

Capital Priorities. A process used by MTC to evaluate and prioritize transit projects in the region. All sources of transit funding, including FTA grants, state programs, and other sources are considered. This process involves all of the transit operators in the region, including bus, rail, and ferries.

Congestion Management Agency (CMA). The agency responsible for developing the Congestion Management Program and coordinating and monitoring its implementation.

Congestion Management Program (CMP). A multi-jurisdictional program to reduce traffic congestion. Required of every county in California with an urbanized area as defined by the Census Bureau (at least 50,000 people).

Council of Governments. A voluntary consortium of local government representatives, from contiguous communities, meeting on a regular basis, and formed to cooperate on common planning and solve common development problems of their area. COGs can function as the RTPAs and MPOs in urbanized areas.

County Minimums. Instituted in 1983 by SB 215 (Foran), the county minimum represents the minimum share of programming each county should receive. Under this statute (Section 188.8 of the Streets and Highways Code), 70 percent of the capital outlay (defined above) funds must be expended in each county according to a formula based 75 percent on county population and 25 percent on state highway miles in the county. The county minimum calculated over a fixed five year period called a quinquennium.

Database. 1) A collection of data from which information is derived and from which decisions can be made; and 2) A non-redundant collection of data items that can be processed by one or more computer applications.

Federal Highway Administration (FHWA). A division of the U.S. Department of Transportation, established to ensure development of an effective national road and highway transportation system. It assists states in constructing highways and roads, and provides financial aid at the local level.

Flexible Congestion Relief (FCR). One of the state's funding programs for local or regional transportation projects that will reduce congestion. State highway projects, local roads, and rail guideway projects are all eligible.

Fund Estimate. The STIP cycle begins with the development of the Fund Estimate, which compares existing commitments against total estimated revenue expected from state and federal sources. Caltrans estimates state and federal funds "reasonably expected" in annual increments for 7 years (the STIP period). The calculation of existing capital program commitments is based on Caltrans' Project Delivery Report (see definition below), while non-capital expenditures of operation and administration costs are estimated based on current spending and projected needs. This comparison of revenues to commitments results in an estimate of total uncommitted funds that are available for programming and which are then prorated to each program category. The Fund Estimate is required by law to be submitted by 7/15 of odd-numbered years and to be adopted by the CTC by 8/15 of odd numbered years. CTC adopts a policy, known as the "Fund Estimate Methodology" that guides Caltrans in formulating the Fund Estimate.

High Occupancy Vehicle Lane (HOV). A lane of freeway reserved for the use of vehicles with more than a preset number of occupants; such vehicles often include buses, taxis and carpools.

Indirect Source Control Measure. The Federal Clean Air Act defines indirect source as "...a facility, building, structure, installation, real property, road or highway which attracts, or may attract, mobile sources of pollution." An indirect source control measure is a rule or ordinance established to reduce the mobile source emissions associated with specific activity centers such as those noted above.

Interregional Road System (IRRS). On February 1, 1990, Caltrans submitted a plan to the state legislature that identified a set of projects that "will provide the most adequate interregional road system to all economic centers in the State." Statute defines eligible routes that were included, and specified that these be located outside the boundaries of urbanized areas of over 50,000 population, "except as necessary to provide connection for continuation of the routes within urban areas." From this plan, Caltrans includes projects, consistent with the Fund estimate, in its PSTIP to the CTC for programing in the STIP.

Level of Service (LOS). A qualitative measure describing operational conditions within a traffic stream; generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

Metropolitan Transportation Commission (MTC). Created by the state legislature in 1970 to prepare a Regional Transportation Plan for the nine counties of the Bay Area. Other important responsibilities

include: approving transportation projects that receive state or federal funding, allocating several sources of funds for transit operations, evaluating the performance of the transportation system and the provision of transportation service, promoting and setting guidelines for transit systems coordination, and advocating adequate transportation funding. MTC consists of 16 voting members, including one member from ABAG, and one member from the Bay Conservation and Development Commission. MTC also includes 2 non-voting members, from the state and federal transportation agencies.

Metropolitan Transportation System . A regional, multi-modal transportation system defined as part of MTC's RTP (see definition below). Emphasizes a balanced strategy of highway, arterial, and transit capital investments and operational improvements to manage congestion projected over the next 20 years.

Model: Gravity. A mathematical trip distribution model that is based on the premise that the amount of travel between two zones in proportional to the amount of activity in each of the two zones and inversely proportional to the impedance to travel between the two zones. In other words, trips produced in any given area will distribute themselves in accordance with the accessibility of other areas and the opportunities.

Model: Land Use. A model used to predict the future spatial allocation of urban activities (land use), given total regional growth, the future transportation system, and other factors.

Model: Mode Choice. A model used to forecast the proportion of total person trips on each of the available transportation modes.

Model: Regional Growth. A model used to estimate land uses in a region.

Model: Travel Demand. A mathematical equation or graphic technique used to simulate traffic movements, particularly those in urban areas or on a freeway.

North/South Split. State law (Section 188 of the Streets and Highway Code) requires that programming be balanced so that 60 percent of the capital outlay (see definition above) is spent in the 11 Southern counties, and 40 percent is spent in the North (45 counties). This balance must occur for the period July 1, 1989 to June 30, 1993, and for each subsequent five year period. This rule has a serious impact on the type of projects programmed in the North or the South. Rehabilitation and safety funds have historically tended to be spent roughly 60 percent in the north, and only 40 percent in the South, due to worse weather conditions and more mountainous roads in the North. In addition, engineering costs are relatively higher in the North than in the South. Furthermore, Caltrans' project support for locally funded projects, of which the North has a disproportionate share, is also included. Thus, funds for capacity increasing projects have historically been weighted towards the South, so that the overall balance remains 60 percent/40 percent.

Obligation. An action by an administrative agency approving the spending of money for a specific purpose to a specific grant recipient.

Pavement Management System (PMS). Required by Section 2108.1 of the Streets and Highways Code, any jurisdiction that wishes to qualify for funding under the STIP must have a PMS that is in conformance with the criteria adopted by the Joint City/County/State Cooperation Committee. At a minimum, the PMS must contain:

- An inventory of the arterial and collector routes in the jurisdiction that is reviewed and updated at least biennially;
- An assessment of pavement condition for all routes in the system, updated biennially;
- Identification of all sections of pavement needing rehabilitation or replacement; and
- Determination of budget needs for rehabilitation or replacement of deficient sections of pavement for the current biennial period, and for the following biennial period.

Certification is done by implementing jurisdiction and submittal to MTC. MTC then makes a finding of agreement with the certification and transmits the certification to the CTC with the RTIP.

Peak (Peak Period, Rush Hours). 1) The period during which the maximum amount of travel occurs. It may be specified as the morning (A.M.) or afternoon or evening (P.M.). 2) The period when demand for transportation service is the heaviest.

Principal Arterial. The functional classification system at the federal level defines principal arterials for rural areas, urbanized areas, and small urban areas. (Note: other definitions of principal arterials exist). In urbanized areas, the principal arterial system can be identified as unusually significant to the area in which it lies in terms of the nature and composition of travel. Principal arterials derive their importance from service to rural oriented traffic, but equally or even more importantly, from service for major movements within the urbanized area. The principal arterial system should carry the major portion of trips entering and leaving the urban area, as well as the majority of through movements desiring to bypass the central city. In addition, significant intra-area travel, such as between major business districts and outlying residential areas, between major inner city communities, or between major suburban centers should be served by this system. Frequently, the principal arterial system will carry important intra-urban as well as intercity bus routes. Finally, this system in small urban and urbanized areas should provide continuity for all rural arterials which intercept the urban boundary. Because of the nature of the travel served by the principal arterial system, almost all fully and partially controlled access facilities will be part of this functional system. However, this system is not restricted to controlled access routes. The spacing of urban principal arterials will be closely related to the trip-end density characteristics of particular portions of the urban areas. The US Department of Transportation provides the guidance than 50-65 percent of the VMT should be accounted for on the principal arterial system.

Project Delivery Report. Government Code Section 14525.5 requires Caltrans to submit to the legislature by November 15 of each year a report on the delivery of all state highway projects in the adopted STIP which cost $1M or more and for which the department is the responsible agency for project development work (including some, but not all locally funded projects). The report must identify milestone dates by month and year for these projects, and must summarize the number of projects which met milestones and identify those that failed to meet one or more milestones. For those that failed, the report must explain the reasons for the delay and present a plan to resolve any problems and a new schedule for delivery. The Plan must also include an estimate of Caltrans' capital outlay project development staffing needs for the next fiscal year in order to delivery the adopted STIP. The Report must also include a determination of the portion of project development work that will be performed by Caltrans and the portion that will be "contracted out." This Plan is then assessed by the Legislative Analyst in its annual analysis of the Governor's proposed budget.

Project Study Report (PSR). Chapter 878 of Statutes 1987 requires that any capacity increasing project on the state highway system, prior to programming the STIP, have a completed PSR. The PSR must include a detailed description of the project scope and estimated costs. The intent of this legislation was to improve the accuracy of the schedule and costs shown in the STIP, and thus improve the overall accuracy of the estimates of STIP delivery and costs.

Proposed State Transportation Improvement Program (PSTIP). This seven-year program is based on the adopted STIP and the most recent Project Delivery Report. It may include additional schedule changes and/or cost changes, plus new projects that Caltrans proposed for the interregional road system, retrofit soundwalls, and toll bridge and aeronautics programs, as well as the intercity rail program. Caltrans may also propose, under specified conditions, alternative FCR projects to those proposed in the RTIPs; this is the only overlap with the RTIPs. The PSTIP is due to the CTC on 12/1 of odd numbered years.

Proposition 116. Passed by voters in June of 1990, this initiative sponsored by the Planning and Conservation League provides $1.99B in rail bonds, primarily to projects specified in the legislation. Guidelines for the implementation of the program were available in the Fall of 1990.

Public Transit (Mass Transit). Passenger transportation service, usually local in scope, that is available to any person who pays a prescribed fare. Operated on established schedules along designated routes or lines with specific stops and is designed to move relatively large numbers of people at one time. Examples include bus, ferry, light rail and rapid transit.

Public Transportation. Transportation service to the public on a regular basis using vehicles that transport more than one person for compensation, usually but not exclusively over a set route or routes from one fixed point to another. Routes and schedules may be determined through a cooperative arrangement. Subcategories include public transit service, and paratransit service that are available to the general public.

Quadrennium. A fixed four year period, over which county minimums are calculated. In each quinquennium, a county should receive at least its county minimum share of the total program. The first quinquennium ran from 1982/3 to 1987/88. The second encompasses 1988/89 through 1992/93. The third quinquennium starts in 1993/94 and ends in 1997/98; four of these years were programmed in the 1990 STIP. The fourth quinquennium (which will begin to be programmed in the 1992 STIP) includes 1998/99 through 2003/4.

Regional Transportation Improvement Program (RTIP). A list of proposed transportation projects submitted to the CTC by the regional transportation planning agency (for the Bay Area. MTC), as a request for state funding. The individual projects are first proposed by the CMAs, then evaluated and prioritized by the regional agency for submission to the CTC. The RTIP has a seven year planning horizon, and is updated every two years. MTC may only include projects in its RTIP that are first included in a CMP.

Regional Transportation Plan (RTP). A comprehensive 20-year plan for the region, updated every two years by the regional transportation planning agency (for the Bay Area. MTC). The RTP includes goals, objectives and policies, and recommends specific transportation improvements.

Ridesharing. Two or more persons traveling by any mode, including but not limited to, carpooling, vanpooling, taxipooling, jitney and public transit.

Regional Traffic Signalization and Operations Program (RTSOP). Administered by MTC, this program was created to fund traffic signalization projects that implement cost effective traffic control measures. The types of eligible projects include signal re-timing; upgrades of existing controllers to comply with AB 3418 and NTCIP; repair, replacement, installation, and improvement of hard-wire interconnect systems; and upgrade and improvements to traffic signal systems.

Short Range Transit Plans (SRTP). A seven-year comprehensive plan required by federal and regional transportation funding agencies of all transit operators. The plans must define the operator's mission, analyze its past and current performance, and plan specific operational and capital improvements to realize its short-term objectives.

State Highway Operations and Protection Program (SHOPP) [Formerly called the Highway System Operations and Protection Plan (HSOPP)]. A program created by state legislation that includes state highway safety and rehabilitation projects, seismic retrofit projects, land and buildings projects, landscaping, some operational improvements, bridge replacement, and the minor program. SHOPP is a four year program of projects, adopted separately from the STIP cycle. The June 1990 gas tax increase partially funds the program, but it is primarily funded through the "old" 9 cent gas tax and federal funds. For the purposes of the Fund Estimate, a formula based on a pavement index and safety concerns is used to estimate an additional 3 years of the SHOPP program.

State Implementation Plan (SIP). State plan required by the Federal Clean Air Act of 1990 to attain and maintain national ambient air quality standards. It is adopted by local air quality districts and the State Air Resources Board.

State/Local Partnership. Originally created by SB 140, and subsequently funded by the passage of Proposition 111 by the voters in June of 1990, the State/Local Partnership provides state matching funds for locally funded and constructed highway and exclusive public mass transit guideway projects. $2 billion over ten years have been designated for this program. Eligible projects are defined by the legislation and clarified by guidelines published by the Caltrans Division of Local Streets and Roads. Applications are annually submitted to Caltrans (by June 30 for the following fiscal year), which administers the program. The amount of state match available in a given year is dependent upon the number of eligible applicants and the size of the appropriation to the program by the legislature during the budget process. The state match can not exceed 50 percent.

State Transit Assistance (STA). This program provides funding for transit and transportation planning. Fifty percent of the revenues transferred to the TP&D Account (see definition below) are appropriated to STA. STA apportionments to regional transportation planning agencies (MTC in the Bay Area) are determined by two formulas. 50 percent by populations and 50 percent by the amount of operator revenues (fares, sales tax, etc.) for the prior year. The Bay Area usually receives about 38 percent of the amount available for STA state-wide. STA funds may be used for transit capital or operating expenditures. Passage of Proposition 117 disallows use of STA funds for streets and roads in the non-urban counties.

State Transportation Improvement Program (STIP). A list of transportation projects, proposed in RTIPs and the PSTIP, which are approved for funding by the CTC.

Traffic Systems Management (TSM) Program. A state-funded program that funds those projects which "increase the number of person trips on the highway system in a peak period, without significantly increasing the design capacity of the system, measured by vehicle trips, and without increasing the number of through traffic lanes". This program is funded outside of the STIP process, through direct application to Caltrans. The CTC programs the projects from a prioritized list submitted by Caltrans. Statute requires that priority be given to projects from counties with adopted CMPs.

Transit Capital Improvement Program (TCI). A state program, currently funded primarily from the TP&D account (see definition below) for transit capital projects and the STA program (see definition above). An annual program, all state funds must be matched 50 percent by local funds.

Transit Operators Coordinating Council (TOCC). A statutorily created committee of MTC that consists of the General Managers of the major transit operators in the region. It meets monthly to discuss matters of mutual concern and to advise MTC.

Transportation Control Measures (TCMs). A measure intended to reduce pollutant emissions from motor vehicles. Examples of TCMs include programs to encourage ridesharing or public transit usage, city or county trip reduction ordinances, and the use of cleaner burning fuels in motor vehicles. MTC has adopted specific TCMs, in compliance with the Federal and State Clean Air Acts, that can be found in MTC Resolution No. 2131 and the Transportation Control Measure Plan for the State Clean Air Plan prepared by MTC in December 1994.

Transportation Demand Management (TDM). "Demand-based" techniques for reducing traffic congestion, such as ridesharing programs and flexible work schedules enabling employees to commute to and from work outside of the peak hours.

Transportation Improvement Program (TIP)- A federally required document produced by the regional transportation planning agency (MTC in the Bay Area) that states the investment priorities for transit and transit-related improvements, mass transit guideways, general aviation and highways. The TIP is the MTC's principal means of implementing long-term planning objectives through specific projects.

Transportation Management Association (TMA). A consortium of business and industry (private sector) interests formed to help solve mutual transportation problems. A TMA is not in any form a publicly sponsored or coordinated agency or group.

Transportation Planning and Development Account (TP&D). A state account, funded by the sales tax on the new 9 cent gas tax and the diesel sales tax, that is the primary funding source for the TCI (see definition above) program.

Transportation System Management (TSM). A set of relatively low-cost techniques to relieve congestion without adding vehicle capacity to the transportation system. TSM techniques are numerous. Some are "demand-based" techniques such as ridesharing programs and flexible work schedules enabling employees to commute to and from work outside of the peak hours. (Sometimes the demand-based strategies are referred to as TDM). Other TSM measures are engineering-oriented, such as timing traffic signals to smooth the flow of traffic, and ramp metering, which regulates the entrance of vehicles onto a freeway, increasing the efficiency of the freeway.

Urban and Commuter Rail. A state funding program financed by the sales and bonds authorized by Proposition 108. Two additional bond measures to fund this program were rejected by voters in 1992 and 1994. All projects must be matched 50 percent by local funds. Projects are proposed through the CMP process to regional agencies, which then may include them in their RTIPs.

Federal Transit Administration (FTA). A division of the U.S. Department of Transportation, delegated by the Secretary of Transportation to administer the federal transit program under the Urban Mass Transportation Act of 1964, as amended, and various other statutes.

FTA Section 3 Funds. Discretionary transit capital fund provided by the federal government through FTA. New Rail Starts and Extensions are funded through this program, which operates through earmarking at the Congressional level. The Section 3 program is updated approximately every four years. The minimum local match is 20 percent, although larger local shares are encouraged.

FTA Section 8 Funds. Transit operating funds provided by the federal government through UMTA. Made available through Section 8 of the Urban Mass Transportation Act of 1972, Section 8 funds are available for planning components of the operating budget, only, such as development of Short Range Transit Plan.

FTA Section 9 Capital Funds. Capital funds provided by the Federal government through FTA. Section 9 capital funds are available to support capital purchases only. They must be matched with local capital funds on an 80 percent federal. 20 percent local basis.

FTA Section 9 Operating Funds. Operating funds provided by the Federal government through FTA. Available only to support annual operating budgets. Capital purchases must be supported with other funds. The total amount of Section 9 operating funds is determined by Congress each year and is then divided among regions and operators within regions on a formula basis.

FTA Section 16 (b) 2 Funds. Funds provided by the federal government through FTA to private non-profit providers of transportation for the elderly and handicapped. Program is administered annually in the Bay Area by MTC.

FTA Section 18 Funds. Transit funds provided by the federal government through FTA by formula to rural areas. Administered by Caltrans in California, these funds can be used for either capital or operating expenses. Capital projects require a 20 percent local match. Operating projects require a 50 percent local match.

Urbanized Area. As defined by the Bureau of the Census, a population concentration of at least 50,000 inhabitants, generally consisting of a central city and the surrounding, closely settled, contiguous territory (suburbs). The boundary is based primarily on a population density of 1,000 people/mile, but also includes some less densely settled areas, as well as such areas as industrial parks and railroad yards, if they are within areas of dense urban development. The boundaries of urbanized areas, the specific criteria used to determine urbanized areas, or both, may change in subsequent censuses.

Vehicle Miles Travelled (VMT). Travel demand forecasting (modelling) is used to generate the average trip lengths for a region. The average trip length measure can then be used in estimating vehicle miles of travel, which in turn is used in estimating gasoline usage or mobile source emissions of air pollutants.

Vehicle Occupancy. The number of people aboard a vehicle at a given time; also known as auto or automobile occupancy when the reference is to automobile travel only.

Vehicle Trip. A one-way movement of a vehicle between two points.